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ENERGY SPECULATION: IS GREATER REGULATION NECESSARY TO STOP PRICE MANIPULATION? (PART II)

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND
INVESTIGATIONS

OF THE

COMMITTEE ON ENERGY AND
COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

JUNE 23, 2008

Serial No. 110–128

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energycommerce.house.gov

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U.S. GOVERNMENT PRINTING OFFICE
56–525 PDF WASHINGTON : 2008

For sale by the Superintendent of Documents, U.S. Government Printing Office
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CONTENTS

Page

Hon. Bart Stupak, a Representative in Congress from the State of Michigan, opening statement 1

Hon. Ed Whitfield, a Representative in Congress from the Commonwealth of Kentucky, opening statement 4

Hon. John D. Dingell, a Representative in Congress from the State of Michigan, opening statement 5

Hon. Joe Barton, a Representative in Congress from the State of Texas, opening statement 7

- Prepared statement 9

Hon. Jay Inslee, a Representative in Congress from the State of Washington, opening statement 10

Hon. Greg Walden, a Representative in Congress from the State of Oregon, opening statement 11

Hon. Charlie Melancon, a Representative in Congress from the State of Louisiana, opening statement 13

Hon. Michael C. Burgess, a Representative in Congress from the State of Texas, opening statement 14

Hon. Mike Rogers, a Representative in Congress from the State of Texas, prepared statement 16

Hon. Gene Green, a Representative in Congress from the State of Texas, prepared statement 104

WITNESSES

Fadel Gheit, Managing Director and Senior Oil Analyst, Oppenheimer & Co., Inc. 17

- Prepared statement 19

Roger Diwan, Partner and Head of Financial Advisory, PFC Energy 25

- Prepared statement 27
- Answers to submitted questions[1] .....

Michael W. Masters, Managing Member and Portfolio Manager, Masters Capital Management, LLC 41

- Prepared statement 43
- Answers to submitted questions 440

Edward M. Krapels, Ph.D., Director, Energy Security Analysis, Inc. 61

- Prepared statement 63
- Answers to submitted questions 451

Doug Steenland, President and Chief Executive Officer, Northwest Airlines 137

- Prepared statement 139
- Answers to submitted questions 454

Steven R. Williams, Chairman and Chief Executive Officer, Maverick USA, Inc. 148

- Prepared statement 150

Eugene A. Guilford, Jr., Executive Director and Chief Executive Officer, Independent Connecticut Petroleum Association 164

- Prepared statement 167
- Answers to submitted questions 458

Walter Lukken, Acting Chairman and Commissioner, U.S. Commodity Futures Trading Commission 196

- Prepared statement 200
- Answers to submitted questions 461

James Newsome, Ph.D., Chief Executive Officer and President, New York Mercantile Exchange, New York, New York 234

- Prepared statement 236
- Answers to submitted questions 488

Page
Sir Robert Reid, Chairman, ICE Futures Europe, Intercontinental Exchange, Inc., Atlanta, Georgia 240
  Prepared statement 242
  Answers to submitted questions 493
Michael Greenberger, J.D., Professor of Law, Director, Center for Health and Homeland Security, University of Maryland, Baltimore, Maryland 251
  Prepared statement 254
  Answers to submitted questions 509

SUBMITTED MATERIAL

Slides accompanying Mr. Stupak's opening statement 304
Chart entitled "Jet Fuel—A New Reality", submitted by Mr. Green 307
Congressional Record excerpt, submitted by Mr. Burgess 308
Letter of June 20, 2008, from U.S. Commodity Futures Trading Commission to Messrs. Dingell and Stupak 309
Reports, dated 2008, from Credit Suisse Commodities 311
Slides presented during hearing 344
CFTC Fact Sheet 363
Letters from Fuel Coalition 367
  Dated June 11, 2008, to Representatives Reid, McConnell, Pelosi, and Boehner 367
  Dated June 20, 2008, to Mr. Stupak 369
Report, dated January 29, 2003, from Congressional Research Service 371
Letter of June 18, 2008, from Joint Trades to Senators and Members of Congress 388
Glossary of Key Terms for hearing 390
Senate Testimony of Michael W. Masters, dated May 20, 2008 394
News clips, dated June 19, 2008 413
Subcommittee exhibit binder 531

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[1] Mr. Diwan did not answer submitted questions for the record.

ENERGY SPECULATION: IS GREATER REGULATION NECESSARY TO STOP PRICE MANIPULATION? (PART II)

MONDAY, JUNE 23, 2008

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, D.C.

The subcommittee met, pursuant to call, at 11:00 a.m., in room 2123, Rayburn House Office Building, Hon. Bart Stupak (chairman of the subcommittee) presiding.

Present: Representatives Stupak, Melancon, Green, Inslee, Dingell (ex officio), Whitfield, Walden, Burgess, and Barton (ex officio).

Also Present: Representatives Ross and Rogers.

Staff Present: Scott Schloegel, John Sopko, Richard Miller, John Arlington, Kyle Chapman, Carly Hepola, Katherine Graham, Alan Slobodin, Peter Spencer, and Whitney Drew.

OPENING STATEMENT OF HON. BART STUPAK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. STUPAK. This meeting will come to order.

Today we have a hearing entitled, "Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? Part II."

Each member will be recognized for an opening statement. I will begin.

Today's hearing will examine whether excessive speculation in the oil futures market is contributing to the unprecedented $70 increase in crude oil prices in just 1 year. This spike has sent gasoline up 107 percent to more than $4 a gallon, And diesel costs are up 188 percent to $4.70 per gallon.

The wallets of consumers have been hit hard and industries that depend on energy are hemorrhaging in red ink. And for some companies, their very survival is in jeopardy.

But what has caused this unprecedented rise? Is it too much demand chasing too little supply? Or is it excessive speculation and greed inflating prices? Here is what some of the oil experts have said.

Quote, "I cannot think of any reason that explains the run-up in crude oil price besides excessive speculation." Fadel Gheit, managing director, Oppenheimer & Company, who will testify today.

Another quote: "There may now be upwards of $25 to $30 of speculation in the price of crude, which continues to soar despite stockpiles in the U.S." MF Global Energy Risk Management Group.

Quote, “The proper range of oil prices should be somewhere between $35 and $65 a barrel.” John Hofmeister, president of Shell Oil Company.

The International Monetary Fund also echoes these views.

Quote, “It appears that speculation has played a significant role in the run-up in oil prices as the U.S. dollar has weakened and investors have looked for a hedge in oil futures and gold. What this means is that oil has been transformed from an energy source into a financial asset, like gold, where much of the buying and selling is driven by speculators instead of producers and consumers. It means that bets are placed driven by interest rates, inflation expectations, and portfolio manager investment decisions,” end of quote.

The growth of commodity index investment supports the IMF conclusion that oil has become a financial asset. They have skyrocketed from $13 billion in 2003 to an estimated $260 billion in March of 2008.

Just this past weekend, the Secretary of Energy and Oil Ministers met in Saudi Arabia to discuss the oil crisis. However, the Secretary of Energy could have made a much shorter trip to New York or Chicago to find an immediate way to address high prices at the pump. We must end the excessive speculation in the energy markets. Even the Saudi oil minister has argued that high oil prices are due to excessive speculation in the markets. Bringing down oil prices will require a multi-pronged approach of conservation, strengthening the value of the dollar, and ending excessive speculation in the energy markets. My bill, H.R. 6330, known as the “Prevent Unfair Manipulation of Prices” or PUMP “Act of 2008,” will deliver the quickest and most comprehensive reforms needed to end excessive speculation.

Since the most popular commodity index, called the Goldman Sachs Commodity Index, has 78 percent in energy commodities like oil and gasoline, it seems fair to ask whether a twentyfold increase in commodity index investment is contributing to a bubble in oil prices. Lehman Brothers estimates that the benchmark crude oil futures price goes up about 1.5 percent for every $100 million in commodity index investments.

Why is this phenomenon significant to you when you fill up your gas tank? Because your pension fund manager may be using your retirement money to drive up the price of oil. What would happen if pension fund managers decided to increase their commodity investment by another twentyfold? We don’t know the answer and apparently neither does anyone in the Administration, but nothing is standing in their way from increasing such investments.

This is what the experts are saying. Let’s look at some of the data.

Chart number 1 shows the number of futures contracts for crude oil has grown 425 percent, almost in lock step with the oil price increases over the past 5 years.

Chart number 2 shows that the speculators have increased their share of futures contracts in oil from 37 percent in 2000 to a whopping 71 percent in April 2008. Meanwhile, the producers and refiners who actually use the futures market to hedge price risk have shrunk from 63 percent to 29 percent.

What is going on here? Have speculators hijacked trading on the futures exchanges?

We are told we should be grateful to speculators for providing liquidity that allows the futures markets to operate, but this data suggests that the oil futures market is drowning in liquidity. Today we hope to learn whether this wave of speculation has separated prices from the very supply and demand fundamentals that are supposed to balance the market.

The Commodity Futures Trading Commission, CFTC, tells us the speculators are simply following the price signals set by physical consumers and producers. But given this imbalance, you have to wonder if the regulator is missing the forest for the trees.

Chart number 3 shows the rapid growth in swaps dealers buying oil futures. Swaps dealers are investment banks who set up the commodity index deals for pension funds and sovereign wealth funds.

[The information appears at the conclusion of the hearing.]

In 2000 these swap dealers had only 10 percent of the contracts to buy futures contracts. However, that number has tripled to 30 percent in 2008. In fact, the New York Mercantile Exchange, NYMEX, has granted 117 hedging exemptions since 2006 for West Texas Intermediate crude oil contracts, many of which are for swap dealers with no physical hedging positions. Is it a coincidence that investment banks tripled the number of futures contracts they are buying at the same time that oil prices are skyrocketing?

Today we want to find out whether the CFTC understands the degree to which speculators of various stripes and motivations have seized control over a significant majority of oil futures.

We want to find out whether the CFTC is going to shed light on the vast over-the-counter market, where energy derivatives are traded but go unregulated.

We want to find out if the CFTC and its staff are sufficiently motivated to question the activities of Wall Street and its powerful investment bankers.

We want to explore the arcane loopholes which allow investment banks and commodity dealers to evade speculative position limits that are supposed to prevent price distortion.

CFTC claims it found no evidence that the futures markets have been subject to excessive speculation, but on May 29th it issued a special call to swap dealers for data on their investment in commodity indexes. We note this action came 9 days after one of our witnesses, Mike Masters, questioned the impact of an estimated twentyfold increase in commodity index investments.

Today we will also assess the impacts to key sectors of our economy, such as the airlines, trucking, and petroleum marketing. Airlines are eliminating service to over 100 cities, laying off thousands of workers, and projecting up to $13 billion in losses this year due to jet fuel price increases that cannot be passed on to the consumer.

Last week, CFTC, Commodity Futures Trading Commission, reversed its long-held view regarding one loophole that allows foreign boards of trade to offer electronic trading screens in the United States. But it still allows the trading on these terminals to play by less rigorous regulatory standards in a foreign country. When we held our last hearing on energy speculation on December 12th, CFTC opposed the idea of requiring ICE Futures in London to abide by U.S. rules governing excessive speculation regarding crude oil. Six months later, I am pleased to see the CFTC dropped its opposition and will require ICE traders to be governed by certain U.S. rules.

This is not the only loophole we need to examine. We also need to look at eliminating exceptions for swap dealers, providing greater transparency for trading in the $9 trillion over-the-counter market for commodities. We will look at whether it makes sense to prohibit index speculators from using commodity markets and whether increasing margins on financial speculators is a way to burst the oil price bubble.

Make no mistake about it: Excessive speculation in commodity markets is having a devastating effect at the gas pump and is rippling throughout our entire economy. If we do not act now with swift diligence, we risk having our economy brought to its knees. This committee has responsibility for energy policy and we intend to make sure that we find solutions, place them on the President's desk, and deliver relief to the American people. We hope today's hearing will help illuminate this issue for the administration and the American people; then we can work together on a bipartisan basis to solve this problem.

I next go to the gentleman from Kentucky, Mr. Whitfield, for his opening statement, please.

OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. WHITFIELD. Well, Chairman Stupak, thank you very much.

And we certainly welcome our witnesses today on this important hearing relating to energy.

Last week, the Energy Information Administration reported the gasoline average price was $4.13 a gallon across the country, more than $1 a gallon over last year. Diesel prices last week averaged $4.70 per gallon, almost $2 per gallon more than this time last year. Heating oil and jet fuel prices are also at record highs, as is the cost of crude oil, which has risen almost $70 per barrel, double the price a year ago.

The American people and others want to know, is this due to supply and demand? Is it due to excessive speculation in the futures markets? Is it due to the declining value of the dollar, refinery capacity, or a combination of all of these things?

This morning, we are going to hear from witnesses who will describe the economic impact that these prices are having on their businesses and how that is affecting their continued opportunity to provide jobs. We will also hear from energy market economists and participants who will explain the recent run-up in prices and help us understand, hopefully, whether the growth in noncommercial speculation in the energy commodities market is inflating oil prices significantly beyond underlying market fundamentals.

The energy futures market is certainly a complicated market, and it serves an important function for those who actually buy and sell oil to hedge price risk and to reduce price volatility. It also appears that it has served financial markets more broadly as a hedge against the weakening dollar and inflation.

The numbers here are as dramatic as those we see at the pump. Over the past 5 years, the number of oil futures contracts has jumped from 700,000 to more than 3 million. A large portion of this growth has involved not traditional physical oil hedgers, but institutional investors such as public and private pension funds who are now getting into this market.

The value of open interest associated with these institutional investors has risen from a mere $13 billion to $260 billion over the past 5 years. And this rise appears to correlate to the run up in oil futures prices.

We need to understand exactly what is causing this increase in prices, especially any recent factors that have propelled those prices to current historically high levels. Is this a speculative bubble driven by the market expectations and speculative fervor that prices will continue to rise? Are these expectations realistic? Does this run-up reflect the growing role and goals of various institutional investments and commodity index funds?

And what does all this mean for traditional market participants concerned about the physical supply and delivery of oil? Is the Commodity Futures Trading Commission doing enough? Does it need more information from exchanges and from over-the-counter markets? Do margin requirements need to be changed? So we will be hearing from the Commodity Futures Trading Commission today.

And I would also mention that many members on this committee cosponsored legislation introduced by Ranking Member Barton a few weeks ago to have an interagency study of the effects of speculation on energy prices and to have more comparable regulation over foreign and domestic markets that trade U.S. commodities.

We will also discuss other rules and regulations, such as increasing margin requirements that I mentioned earlier. All of these matters are going to be open for discussion this morning.

I want to thank Chairman Stupak for holding this hearing. It is certainly a timely issue, one that the American people are extremely focused on. And I look forward to the testimony of all of our witnesses and the opportunity to ask them questions to help us better understand the situation we are in today.

I yield back my 45 seconds.

Mr. STUPAK. Thank you, Mr. Whitfield.

Mr. Dingell for an opening statement, please.

OPENING STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. DINGELL. Mr. Chairman, first of all, I commend you for your superb leadership of this subcommittee. And, second of all, I commend you and thank you for this hearing today.

Today, working Americans are seeing energy costs take an ever-larger bite out of the family budget. Costs have soared for gasoline, electricity, and heating, and increased fuel prices have driven up the price of food and everything else in our society.

This hearing today is laying the preface for this committee to begin to move forward on legislation cosponsored by virtually the entirety of this committee and our good friend Mr. Barton, the Ranking Minority Member. It is our intention to gather the facts today to try to find out exactly what is going on so that we may respond to the concerns that the American people have on these matters.

Dramatic increases in fuel costs are affecting virtually every sector of the American economy. For fuel-intensive industries, in particular, this is a crisis. A case in point is the airline industry, and I want to welcome Mr. Doug Steenland, President and CEO of Northwest Airlines, who will be testifying today on the problem faced by his company and by the airline industry as a whole.

Simply put, millions of Americans are feeling the pain from extraordinary increases in the price of oil, which is carrying through to price increases in everything else in the economy, especially in the energy area.

This brings us to the central issue of this hearing: what caused this dramatic rise in prices? Are record oil prices simply a function of supply and demand, or are they a result of excess speculation, or both?

The International Monetary Fund recently concluded that "speculation has played a significant role in the run-up of oil prices". A Lehman Brothers analysis suggests that more than 50 percent of the price of a barrel of oil may be attributable to speculation. The Saudis note that oil supply and demand seem to be in balance and that there is no substantive basis for current prices. Even the Department of Energy's own Energy Information Administration says that "the flow of investment money" has contributed to a spike in oil prices.

It is commonly held by economists, and I have been told by one of the great ones in a private discussion, that probably at least 25 percent of the shoot-up in oil prices comes from speculation.

It is unfortunate that the Secretary of Energy dismisses speculation as a cause of spiking oil prices and that the Secretary of the Treasury agrees, shrugging it off as a "tough period". Admittedly, he is right, it is a tough period. But there is a cause, and it must be ferreted out. In short, real solutions from this administration are harder to find than $3-a-gallon gasoline.

The oil producers say that the answer is to drill for more oil. The environmental community says the answer is to conserve energy, to change the way we live, work, and play. Both sides have a valid point. We should search for more oil, although I note that the oil companies aren't drilling on land they already have. And the environmentalists are right—we need to conserve energy. But both are long-term solutions that will likely take at least 10 years; they will do little to solve the immediate problem we face, and such actions will not curb the current excess speculation and manipulation in the oil markets.

Mr. Chairman, as our witnesses will testify today, the sharp rise in energy prices during the Bush administration has been outpaced only by the rise in speculation. Energy speculation has become a fine growth industry, and it is time for the Government to intervene.

We need to consider a full range of options to counter this rapacious speculation. For example, we should examine imposing 50 percent margin requirements on financial speculators; setting position limits on transactions across all future exchanges; requiring full disclosure of all trading by investment banks in all markets; preventing pension funds and others from using the commodity markets as an investment vehicle; and prohibiting investment banks from owning energy assets. These and others ideas need to be debated, evaluated, and acted upon sooner rather than later.

Mr. Chairman, I look forward to the testimony of the witnesses and working with you and my colleagues on this committee to identify the causes of the problem and to address this problem, which is of perhaps the greatest magnitude that we have confronted in the energy area in my career in this Congress.

Thank you, Mr. Chairman.

Mr. STUPAK. Thank you, Mr. Chairman.

I next turn to Ranking Member of the full committee, Mr. Barton from Texas, for an opening statement, sir.

OPENING STATEMENT OF HON. JOE BARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. BARTON. Thank you, Mr. Chairman.

I am going to put my formal statement in the record and just speak off-the-cuff.

You know it is an important hearing when Mr. Walden flies all night to be here, and Mr. Burgess and myself got up around 4 o'clock in the morning in Texas to be here. And I am sure that Mr. Rogers and maybe you, Mr. Stupak, and even Mr. Dingell and Mr. Inslee—Mr. Inslee flew all night from Washington State. We don't normally have hearings at 11 o'clock on a Monday morning. The fact that we are having this hearing and that we are all here shows how important it is.

It is very important, because every week probably every family in America that doesn't live in a central city and use public transportation is paying hundreds of extra dollars out of their pocket to have the mobility that we take for granted to go to work, go to school, and do all the things that Americans do in our great society.

Let me say at the very beginning that speculators are not the cause of high energy prices. We have high energy prices because there is less than a 1 or 2 percent margin of supply over demand in world markets today. When you have that tight of a supply margin, a surplus reserve margin, you create a situation where speculators can drive the price higher because of the uncertainty principle concerning who is going to get that next barrel of oil.

I could make some news today if the Secretary of Energy or the President of the United States would authorize me to announce at this hearing that the Strategic Petroleum Reserve is going to begin to sell 2 million barrels of oil a day beginning 2 weeks from tomorrow.

We have the capacity to produce about 6 million barrels of oil a day out of the SPR. If we were to put 2 million barrels a day of oil on the world market, we could do that for over a year. And if the President were to announce that, probably the price of oil, the futures market, I don't know how far it would fall, but it would almost certainly go below $100 a barrel and stay there.

We don't use the SPR for those purposes. So the President is not going to make that announcement unless we change the law or unless, by act of Congress, we direct the President to do that.

But the fundamental problem that we have is that the world is using 85 million to 86 million barrels of oil every day, and the world is producing 85 million to 86 million barrels of oil every day. And we have been stuck in that rut for the last 2 years, maybe 3 years.

High prices have not resulted in the supply increase that pure markets say should result. Why is that? Part of the reason is we are not drilling in the United States in areas that we know there is oil and gas. We are the only nation in the world that has reserves that we are not developing because of a conscious decision. You can argue the debates of that decision, but the fact is we are the treasure house for energy resources in the world, much more so than Saudi Arabia. So, as long as we keep the supply constant and the demand goes up, you create an opportunity for speculators to move in.

And what Chairman Stupak said earlier is exactly right. When he put those charts up on the board, you look at the positions on the New York Mercantile Exchange, you look at the volume of trading that has increased on the Intercontinental Exchange, and most of it is in what people call video barrels.

Now, I didn't know what a video barrel was until 2 or 3 months ago, but a video barrel is a barrel of oil that is never going to be produced, it is never going to be consumed, but it is going to be traded by somebody who has no intention—no intention—to produce that oil and no intention to put that oil on the market. It is people at keyboards all over the world who are just deciding there is money to be made because of the tight market in oil.

And what Chairman Stupak said about the various swaps and the sovereign wealth funds and all the institutional investors, they are moving into oil because they look at the supply-demand situation and they don't see a supply increase, so they figure, "Well, heck, we have broken all the psychological barriers. We have broken $100-a-barrel oil. Now, people like Boone Pickens are talking about $200-a-barrel oil. So there is no psychological barrier. Why not? Why not?"

And when we get to the technical part of this hearing, you are going to see that the long positions have just grown beyond expectation and that all the physical regulations that we put in place on the U.S. market so that we can't have a repeat of what the Hunt brothers tried to do in the silver market 10 or 15 years ago, the CFTC is giving exceptions. They have given conscious exceptions. And Chairman Dingell and Chairman Stupak have written a very thoughtful letter asking for precise data on why those exceptions were given and how those data are being traded.

So the purpose of today's hearing—and it is a thing to have it on a day when we don't vote until 6:30. We won't be coming in and out. Once we get started, we are going to have the ability for the members of this Oversight Subcommittee to function in the truest sense of oversight for the Energy and Commerce Committee. We can listen to the witnesses. We can get into questions for 10 minutes at a time and really educate both the Members of Congress and the American people on this market and then decide what to do.

And the most important thing about this hearing—I am very glad that we have the gentleman from Great Britain that is with the Intercontinental Exchange. Because it won't do any good if we get more transparency and more regulation that prevents unnecessary speculation in the U.S. exchanges if all that does is take it to the international exchanges. So I am very glad that we have our foreign visitors here.

Mr. Chairman, this is an excellent hearing. You have a great group of witnesses. We have plenty of time. I look forward to the participation in the hearing today.

With that, I yield back.

[The prepared statement of Mr. Barton follows:]

STATEMENT OF HON. JOE BARTON

Thank you, Chairman Stupak and Mr. Whitfield, for this very timely and important hearing on the impact of speculation on energy prices. I very much support this continuing oversight. This hearing can help us find ways to ensure our futures markets are working correctly and not being impacted by excessive speculation.

This Congress needs to face reality about our energy needs. We need more American-made energy, including energy from oil, coal, natural gas, and all the viable alternatives. Another reality is that our nation's economic strength depends on affordable energy for turning on the lights, getting to work, and cooking dinner without having to file bankruptcy papers.

Oil prices have been subject to 4 to 5 years of negative expectations about the tightening of world oil supply and America's own commitment to tap its ample supplies. A clear signal to world markets that America is waking up to these realities and finally seeking to use its own vast energy resources would help change expectations and help lower futures prices.

Another economic reality is that our economy relies on well-functioning commodity markets to help energy producers and energy consumers to hedge their respective price risks, so that they can do their work efficiently. Well-functioning futures markets require transparency and clear rules to guard against manipulation, excessive speculation, and other problems that can harm consumers.

Some of the recent rise in oil prices is believed to be linked to runaway speculation in the futures exchanges, particularly speculation by non-commercial players. This has raised concerns on both sides of the aisle about the rules that govern these exchanges—and whether there are loopholes and other inequities across the foreign and domestic trading venues which are causing problems.

We don't want our U.S. market at a competitive disadvantage to foreign markets. And we don't want these foreign markets trading U.S. energy futures without being subject to the transparency requirements and trading limitations that our domestic markets have.

I am encouraged to see that the Commodity Futures Trading Commission has announced modifications to its Foreign Board of Trade process to address the disparities between the United Kingdom and our regulatory structures. This action is something that would have been required in H.R. 6130—legislation that 19 Republicans and I introduced last month. I only wish CFTC had not waited until legislation was proposed to get started on a job that should have begun awhile ago.

The CFTC says it will require other foreign exchanges to be comparably transparent and provide similar position and accountability limits on speculators that are applied to the U.S. exchange. This is a solid first step to getting control of any runaway speculation.

The CFTC will form a federal interagency task force to examine the issues we will discuss today. This is also a good thing, along the lines of our legislation. I look forward to discussing with our witnesses today some of the questions that should be addressed in this study. For example, how futures prices in the cash market, especially in the forward months, impact the price of energy and other decisions in the physical marketplace.

I also look forward to discussing whether recent CFTC actions are sufficient to safeguard against manipulation. For example, the CFTC did not address exemptions from trading limits provided for so-called swaps transactions, involving commodity index funds, which have grown tremendously with the weakening U.S. dollar.

We'll hear today that these non-commercial speculators have come to dominate futures trading over traditional speculators. I would like to know what that means for the integrity of these markets.

Many Members of both the House and the Senate have introduced all kinds of legislation dealing with futures markets and the CFTC, requiring all sorts of things from energy futures studies to the raising of margin requirements for speculators. I am cosponsoring H.R. 6238, Chairman Dingell's bill, to establish an interagency working group to study the factors that affect the pricing of crude oil and refined petroleum products, and make recommendations on appropriate regulation. I hope that part of what we learn today will be what kinds of further congressional action are appropriate and necessary.

Finally, let me say that the straightforward transparency that's necessary for the markets is equally necessary for these proceedings today. This subcommittee traditionally takes its testimony under oath because it puts a high premium on the absolute accuracy of the information it receives. Today's subject deals with a matter that affects the lives of millions of our people, and I don't think it is possible to understate the strength of our expectation that we will receive only verifiable facts here today.

Mr. Chairman, there are many witnesses who have a lot to say today. I thank you again and yield back the remainder of my time.

# # #

Mr. STUPAK. I thank the gentleman.

Mr. Inslee for an opening statement, please, sir.

OPENING STATEMENT OF HON. JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. INSLEE. Thank you.

I first want to thank Chairman Stupak. Nobody in Congress has done more than Bart Stupak to really peel away the layers of the onion that are really hiding this explosion of speculation in the oil futures market. And I appreciate his work and his work on the PUMP Act that was introduced last week to really bring some sunshine to this.

I want to make four points.

First, when the Saudi oil minister tells you you have a problem with oil prices, you know you have a problem. When Jose Canseco tells you you have a problem with steroids in baseball, you know you have a problem. When the Saudis tell you you have a problem in the oil markets, you know you have a problem. So I am happy we are here today to discuss that.

Second, the approach that we have taken, both with this hearing and Mr. Stupak's PUMP bill, is to actually do something that could have an effect on prices in the relatively short term.

Some people have suggested drilling in some of the most pristine areas in the country, even if it succeeded 20 or 30 years away, it is something our grandchildren could possibly enjoy but we would not. Ending rampant speculation in the oil future market has the capability of doing something for us who are approaching AARP age and above. And that is why it is appropriate for us to get to something that could actually have an impact today, this year, rather than something several decades hence.

Third, those who have argued that somehow we need to have all of this enormous liquidity in the market in order for the markets to function, ignore the charts that Mr. Stupak has put up, showing that the markets are drowning in liquidity. To argue that we need more liquidity is something like arguing the Iowa farmers need more liquid, more liquidity, in Iowa right now.

We have a flood of liquidity in the market. We have had an explosion of speculative positions in these markets, as opposed to real physical risk associated with this. And it is clear that we have a problem in part because of the Enron loophole.

And this is the fourth point I want to make. We really have seen this movie before. Now, I am from the Seattle area. And a few years back, because Congress willfully turned a blind eye and, more importantly, the administration turned a blind eye to manipulation of markets in the Enron scandal, it cost my constituents literally a billion dollars on the west coast of the United States.

And we remember very well arguing with the Administration that the executive branch of the Government had some obligation to rein in this speculative manipulation of the market that was taking place in the dark. And the response by the Administration is, "No problem. There is no problem."

And I was reminded of a conversation when I heard Secretary Bodman yesterday say, or the day before yesterday, saying, "There is just no evidence of speculation in this market." And a little bell went off in my head, where have I heard that before? Well, I heard it when we went to Vice President Cheney years ago, and I pled with him to take action in the original Enron scandal because it was obvious that there was a problem in these markets. It was obvious somebody was gaming the system and that speculation found a way to, in fact, have a price result.

And I showed him a piece of paper showing that actually 32 percent of all the generating capacity in the United States was turned off one morning when there were brownouts in California. And I asked him for relief. I asked the Vice President to do something to rein in this speculative manipulation that was obviously going on. And I will never forget because he looked at me and he says, "You know what your problem is? You just don't understand economics."

Well, I think it turned out that we did understand economics. And I think we do understand liquidity, and we do understand excessive speculation. And we now understand what happens when we remove the protection of the consumers by creating this Enron loophole. And we are experiencing the results of that today.

So I am very appreciative of the chairman's peeling back and shedding a little light. Here is one economic principle that I know: Bad things happen in the dark. And that is where these markets are right now, they are in the dark. And it is time to shed a little light on them, and I am looking forward to this hearing.

Thank you.

Mr. STUPAK. I thank the gentleman.

Next, Mr. Walden for an opening statement, please, sir.

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. Thank you very much, Mr. Chairman.

And I appreciate the hearing that we are having today and the list of very distinguished witnesses that we will hear from. And hopefully we will all emerge from this better educated about the markets and the problems associated with them and ways that we might address them thoughtfully and in a way that will help our consumers and this country.

As I read through the testimony, it reminded me of the GAO investigation I called for several years ago, which was completed and revealed issues involving the market last fall. And I think, for those who haven't read it, you may want to get a copy of it, "Commodity Futures Trading Commission: Trends in Energy Derivative Markets Raise Questions About CFTC'S Oversight." I was not alone in requesting that. A lot of other folks got involved, as well. But I think it is a very good report that outlines the problems that are out there.

And as I read some of the testimony, it becomes clear that different experts have different opinions on how much speculation is involved in this market. Clearly it has grown dramatically. Clearly it is having an effect. And the question is, how do we get transparency, how do we get appropriate regulations, so that we don't have a repeat of what we saw with Enron, as my colleague from Washington State—I being from Oregon, I have folks who suffered similarly. And I think transparency and proper regulation is important.

But I also know, in reading through the testimony, that those who dismiss supply and demand and international troubles as the reason for the run-up in price basically say those things have all been counted in the market a long time ago. And so it seems to me, if you want to stick it to the speculators who are inappropriately manipulating the market, then you do market reforms but you also add to supply.

And I, for one, have supported increased mileage standards. I drive hybrid vehicles. I believe in conservation, investment in new technologies. But I also agree with the Ranking Member that I think it is time to develop America's resources.

Now, you will hear that that is a fool's errand because it might be 7 or 10 years before that oil would ever come to market. And yet I believe that markets respond to signals. And had President Clinton not vetoed the bill that Congress, before I got here, passed to allow America to access oil reserves in Alaska that President Carter had set aside up on the very northern part of that State, that was 1996, if it took 10 years, we would have 2 years of oil that would have been coming out of Alaska now.

So the decisions we make today will affect the markets. I think if we indicated a change in American policy to allow us to access our Outer Continental Shelf and to allow us to develop other sources of oil, we would have an effect on the market.

Unfortunately, this committee, at some point in the Energy Bill of 2007, which I ultimately voted for, stuffed in a little provision that even precludes the use of oil fuel derived from tar sands in Canada from being used for military purposes by the United States military. I am not quite sure what the scientific basis of that is, but it was a political decision that sent, kind of, a perverse signal to the market that we are not going to accept that kind of fuel.

At a time when fertilizer prices and inputs are up a couple hundred percent in my district, at a time when diesel is nearly double what it was a year ago, at a time when the underlying cost structure for farmers has artificially been inflated because of the run-up in the input prices, we have to assess all of these issues: our access to supply domestically; invest in the new technologies; and make sure that the markets are working appropriately. And that means more transparency and more investigation into the system.

So, Mr. Chairman, thank you for this hearing today and I look forward to hearing from all of our witness.

Mr. STUPAK. Thank you.

Mr. Melancon for an opening statement, please.

OPENING STATEMENT OF HON. CHARLIE MELANCON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. MELANCON. Thank you, Mr. Chairman, for holding this hearing.

I appreciate the opportunity, coming from Louisiana, a producing State that has been producing energy for this country for decades and without little reward or appreciation. Unfortunately, our prices are as high as everyone else's. There has been a saying for years in Louisiana, if we can find that valve and turn if off, people would appreciate what we do in Louisiana; Texas, for that matter, and the other Gulf States that are producing off their shores.

You know, I am here today to try and understand and to hopefully help in remedying the problem of high prices to the American citizens and, best I can tell in my recent conversations, to the people of this world. The cost everywhere is just going up, and we need to find what has caused it. We don't need knee-jerk reactions. We don't need to continue to try to blame the people in the past that took actions, because there are some moratoriums that are out there from other than Democrats and there were some actions by other than Democrats in the last Congress that dealt with not drilling off of Florida's coast. So there is enough blame to go around.

What we need to do is we need to sit down and hunker down together, as a Congress, as Americans, and try and figure out what it is that is wrong with the system and produce positive legislation, and hope that we can get the proper executive action that may be needed to stem the drastic rise of energy, and particularly gasoline and diesel fuel and other energies that are causing our businesses and business people and citizens throughout the country to suffer.

It really has come home. When I do get home on weekends is when I hope to see my children. And when their excuse for not being able to see me is that, "Daddy, the price of gasoline is so much that we are trying to conserve, and we are not making trips just so." And I keep saying, I would wish that this would be one of your priorities. However, I understand where they are coming from.

And I appreciate, Mr. Chairman, you calling this hearing and hope that it will help us to understand better what goes on out there and to remedy that situation if it can be.

I yield back my time.

Mr. STUPAK. I thank the gentleman.

Mr. Burgess for an opening statement.

OPENING STATEMENT OF HON. MICHAEL C. BURGESS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. BURGESS. Thank you, Mr. Chairman. And I, too, appreciate you holding the hearing today. I look forward to learning a great deal about this subject. We, of course, had the hearing in December, which was very instructive.

Just to think back to my past life—I haven't been here that long. When I was a simple country doctor, if someone asked me about futures, I really wouldn't have known what they were. I wouldn't have known that they are important. I wouldn't have known that they were around so that they would excise some of the volatility from the market and they, in fact, performed a useful function in that arena.

Speculation involves someone putting up capital and risking that capital. If the market doesn't behave as intended, then that capital can be lost. If the market goes up, obviously that individual who is invested is going to be rewarded. But manipulation really has no place in our markets.

And Mr. Chairman, back in September of 2000, I remember hearing on one of the financial programs on the radio that they expected the market—the market then was in a downturn, and they expected the stock market in general to recover after the presidential election, because they always do. And then several months later, listening to the same radio station and a similar radio show, the question was raised, well, why didn't the market recover after the presidential election? A lot of reasons were given; perhaps the long length of time it took to decide the election. But the other thing that was brought up was that there was just an enormous amount of money sitting on the sidelines, that people were somewhat skittish about the market and were holding off reinvesting. Well, we now know where that money went. It went into oil futures.

Now, it is my hope that, as a result of this hearing today and perhaps others that we will do in the future, again I don't have a quarrel with the speculators, but I do hope that people realize when they bet against the United States of America they may well lose. And, in fact, I hope they do, because I hope we are able to bring prices down—mechanisms such as Mr. Barton suggested, mechanisms such as Mr. Walden suggested, things that will increase supply, and therefore bring down some of the price pressure.

But we also have to have in mind firmly about the future. Now, one of the questions that is going to be posed in probably several different ways today is, should we increase the margins on these futures contracts? And currently my understanding is those margins are 5 to 7 percent. And perhaps they should be higher, much higher, in the range of 30 to 50 percent.

Should we also look at the fact that when you buy an oil futures contract maybe you ought to have some place to put the oil that you're going to buy? In other words, if you have no place to put it, then clearly you are only buying the contract to resell it and hopefully make a profit in the process.

We are going to hear a lot of information today about the lack of transparency, particularly the over-the-counter trading and the Intercontinental Exchange. I certainly can not drive around my district back home in Texas without hearing people wonder if it's not the weakness of the dollar that has caused the price of oil to increase so dramatically. But when you dissect it out, the dollar has lost 30 percent of its value and the price of oil has increased 400 percent. So clearly there is more going on than just the weakness of the dollar.

So when we know—and we have heard other people reference it this morning—when we know, to some degree, how manipulation of the prices perhaps occurred, why have we not repealed that ability that was passed by Congress in 2000?

A lot of people sitting on both sides of this dais actually voted for that bill. I have the roll-call vote here in front of me, if anyone is interested. Speaker Pelosi voted for that bill. This is the Commodity Futures Modernization Act, 19 October 2000. Chairman Dingell voted for this bill. Chairman Stupak voted for this bill.

Well, now that we know what we know, what has taken us so long to repeal it? After all, we're 18 months into a Democratically controlled Congress, and with all of the enlightenment that was supposed to follow that, why are we still now talking about it?

Well, speculation does create liquidity. There is a troublesome aspect here. We were warned about these oil prices, we were warned in this Congress, in September of 2005, after Katrina and Rita. And Chairman Barton tried to do something about it. He introduced legislation in October that would've increased supply, would've increased refining capacity, would've increased new drilling capabilities, and he was rebuffed.

So now it is incumbent upon this Congress to look ahead. And don't just look at what's going on right now. Let's look 10 years into the future. We can see a day where demand will greatly exceed supply. If this is just an oil bubble right now, then so be it; maybe we can deflate it. If we do, I hope we do so gradually, because I don't know that our economic system can contain another shock like it did with the banking industry. But nevertheless, we are looking at a world where demand will greatly exceed supply.

So right now, right now, in a bipartisan way, let's resolve this issue. Let's resolve this issue so we are prepared for that future energy shock.

And I would ask many of those who are going to be testifying in front of us today: Clean up your act. Let's all declare victory. Because, after all, we know that business has to go on. And the economy could scarcely afford a rapid deflation of the oil prices. But, at the same time, we cannot sustain, our economy cannot sustain the price set at the current level that it is.

Thank you, Mr. Chairman, for your indulgence. I'll yield back the balance of my time.

Mr. STUPAK. I thank the gentleman.

Well, that concludes the opening statements of the members of the subcommittee.

I'd like to recognize my colleague, Mr. Rogers. He's a member of the full committee, and he is here to participate today, but unfortunately will not be able to give an opening statement.

Mike, do you have an opening statement you would like to submit for the record?

Mr. ROGERS. I do, Mr. Chairman.

Mr. STUPAK. OK, without objection, it will be submitted for the record.

[The prepared statement of Mr. Rogers follows:]

STATEMENT OF HON. MIKE ROGERS

Mr. Chairman,

Thank you for holding today's hearing. Mr. Chairman, we will hear a great deal of testimony today and I am going to keep my remarks brief. I appreciate your indulgence in allowing me to participate in today's hearing and I am confident that the extensive witness list today will help this committee learn more about an important issue. Like most Members of this committee I want to see American's pay less for gasoline. And like many members of this committee I believe that speculation does play a part in the cost of oil. I hope that today's hearing sheds some light on just what the impact of speculation is on oil prices, and what Congress can do to bring down the cost of energy.

That said, I do think we need to take a moment to think a bit about what the larger problem is here. The cost of oil is driven by supply and demand, and today demand is at or above supply. That means that every barrel of oil is going to be expensive, and even if we eliminate every speculator, something that I doubt we can actually do, the cost of barrel of oil is still going to be very expensive.

Mr. Chairman, today's hearing is important and helpful. But we are kidding ourselves and kidding the American people if we do not do much more to add supply, domestic supply, of oil and gas.

Mr. STUPAK. I also expect—in fact, Mr. Ross from Arkansas has just landed. He will be here shortly. He is also a member of the full committee, and he will be participating this morning, also through questions.

So we look forward to those two members participating with us here today.

I'd ask the first panel of witnesses to come forward.

On our first panel we have Mr. Fadel Gheit, who is Managing Director and Senior Oil Analyst at Oppenheimer & Company; Mr. Michael Masters, who is Managing Member and Portfolio Manager at Masters Capital Management, LLC; Mr. Roger Diwan, who is Partner and Head of Financial Advisory at PFC Energy; Mr. Ed Krapels, Ph.D., who is Director at Energy Security Analysis, Incorporated.

Gentlemen, welcome. I know some of you, as well as many of the witnesses on the other panels, have traveled great distances to be here with us today. We appreciate your willingness to be here and share your knowledge with the committee.

It is the policy of the subcommittee to take all testimony under oath. Please be advised that under the Rules of the House you have the right to be advised by counsel during your testimony. Do any of you wish to be advised by counsel?

Everyone is nodding their head no; I will take it as a no. Therefore, I'm going to ask you to please rise, raise your right hand and take the oath.

[Witnesses sworn.]

Mr. STUPAK. Let the record reflect that the witnesses replied in the affirmative. You are now under oath.

We will now have a 5-minute opening statement from our witnesses. You may also submit a longer statement for inclusion in the record.

So we'll begin opening statements, go from my left, your right. Mr. Gheit, if you will begin, please, with an opening statement, sir.

STATEMENT OF FADEL GHEIT, MANAGING DIRECTOR AND SENIOR OIL ANALYST, OPPENHEIMER & CO., INC.

Mr. GHEIT. Mr. Chairman, good morning. My name is Fadel Gheit. I'm——

Mr. STUPAK. Can you move that forward? Just pull it forward there.

Mr. GHEIT. Good morning.

Mr. STUPAK. Good morning.

Mr. GHEIT. We are on.

Mr. STUPAK. It's on.

Mr. GHEIT. Over the last 12 months, as you all stated, oil prices more than doubled, but industry fundamentals have little changed. The same old factors—supply disruption in Nigeria, Venezuela, Iraq, Iran—all these factors were already embedded or reflected in oil prices a year ago when oil prices were $65. Nothing I can think of that changed over the last 12 months, with the exception of the devaluation of the dollar, caused oil prices to more than double.

I have been for a while saying that oil prices are inflated. They are not supported by market fundamentals. And the reason I base my conclusion that oil prices are extremely high is that I have been in this business almost 30 years. I talk regularly to the COOs of oil companies, from the largest of them all to very small, independent oil and gas companies. They all come to the same conclusion, that oil prices do not reflect market fundamentals. In my view, we can produce oil profitably at less than half the current price levels.

Now, there was no unexpected changes in the industry fundamental in the last 12 months when oil prices were $65. Now oil prices are double that today and are likely to go higher, because, again, the speculation will continue, the same tightness in the market will continue.

We saw what happened yesterday in the gathering in Riyadh or in Jeddah. And basically the Saudi Government said that it is speculation, it is taxes by countries, as well as the devaluation of the dollar, and their continued demand increase in China and India.

The changes in demand in China and India was not new. Actually, demand growth has been trimmed over the last 12 months because of the global economic slowdown. The oil industry, as I said before, can profitably produce oil at less than half the current price.

Now, what do we do about speculation? A lot of people talk about speculation. Some people say it has very little to do with the spike in oil prices. Some people think it more than doubled—or the cause of doubling oil prices.

As I recommended to the Senate panel in December of last year, we should raise the margins requirement to 50 percent, similar to what is required on stocks. We should bar companies operating in the U.S. from trading oil futures on exchanges not in compliance with the regulators. We cannot close the door here and open a window outside of the U.S.

We should set trade and volume limits by commercial in relation to physical needs, only those companies that will physically use the oil. We should set industry standards for airlines, for oil companies, for refiners, to see what is the appropriate level the physical inventory that they should hedge.

Now, we should limit trading by financials to a percentage of the commercial volume. Yes, some people say we need the liquidity and these people provide service. But we don't want them to control the market, as they have in the last few years.

We should bar investment banks and other financial traders from owning energy assets. We should separate crude oil trading from other trading and investment services. We should require full disclosure by investment banks of oil trading results. We should impose stiff penalties, including jail terms, on violators.

That is the end of my statement.

[The prepared statement of Mr. Gheit follows:]

Testimony of
Mr. Fadel Gheit
Managing Director & Senior Oil Analyst
Oppenheimer & Co. Inc.

Before the
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce

June 23, 2008

The House Investigates the Oil Bubble

The Senate and the House of Representatives continue to hold hearings regarding the impact of speculation on the recent run-up in oil prices. Oil prices, which are near their record high reached a couple of weeks ago, are up more than 100% from a year-ago level, despite adequate supply, with no disruptions, and weaker demand outlook than the year ago projection, which should have helped keep oil prices at or below their year-ago level of $65 per barrel, but instead, oil prices more than doubled. Large investment banks keep fanning the fire by making exaggerated oil price predictions that they believe they can help achieve, given the government's inability or unwillingness to hold them accountable.

Below are the main reasons we believe the record oil prices are inflated by speculation and not justified by market fundamentals:

- There were no unexpected changes in industry fundamentals in the last 12 months, when crude oil prices were below $65 per barrel. I cannot think of any reason that explains the run-up in crude oil price, beside excessive speculation.
- World oil demand growth forecasts have been trimmed to reflect the current economic slowdown, which should have resulted in lower, not higher, oil prices.
- World oil production is economic at prices well below $65 per barrel. Marginal replacement cost, however, is distorted by high government take of royalties and taxes due to record oil prices.
- Windfall profits have boosted capital spending and inflated service cost. Bursting the oil bubble could help return the oil markets to more realistic levels.
- Record oil prices in a highly speculated oil market provide fewer incentives for oil exporting countries to increase production, since oversupply, combined with tighter regulations, could cause oil prices to crash.

Below are the answers to the questions by the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce before a hearing held on Monday, June 23, 2008, at 11:00 am in room 2123 Rayburn House Office Building.

Question # 1
The closing price of light sweet crude on the New York Mercantile Exchange was $116.32 per barrel on May 2, 2008. Do the fundamentals of supply and demand justify this price, and if not, what is the dollar amount of the speculative premium in the market at this time? What is your view based on?

I do not believe the current record crude oil price is justified by market fundamentals of supply and demand. I believe the surge in crude oil price, which more than doubled in the last 12 months, was mainly due to excessive speculation and not due to an unexpected shift in market fundamentals. After all, demand growth in China, India and other developing countries was not a surprise and was reflected in crude oil futures a year ago. In fact, the slowdown in global economic growth, caused by the sub-prime debacle and fears of a run on banks, trimmed world oil demand forecasts, which should have resulted in a lower, not higher, oil price. On the supply side, the impact of the unrest in Nigeria on oil exports, the decline in Mexico's crude production, and other less than newsworthy factors, were hardly new news, and were already discounted in crude oil futures.

I firmly believe that the current record oil price in excess of $135 per barrel is inflated. I believe, based on supply and demand fundamentals, crude oil prices should not be above $60 per barrel. My view is based on the following observations:

- There were no unexpected changes in industry fundamentals in the last 12 months, when crude oil prices were below $65 per barrel. I cannot think of any reason that explains the run-up in crude oil price, beside excessive speculation.
- World oil demand growth forecasts have been trimmed to reflect the current economic slowdown, which should have resulted in lower, not higher, oil prices.
- World oil production is economic at prices well below $65 per barrel. Marginal replacement cost, however, is distorted by high government take of royalties and taxes due to record oil prices.
- Windfall profits have boosted capital spending and inflated service cost. Bursting the oil bubble could help return the oil markets to more realistic levels.
- Record oil prices in a highly speculated oil market provide fewer incentives for oil exporting countries to increase production, since oversupply, combined with tighter regulations, could cause oil prices to crash.
- Sharing our conclusion that the surge in crude oil prices is driven mainly by excessive speculation are; Energy Secretary, Samuel Bodman, OPEC oil ministers, and the CEOs of major oil companies.

Question # 2
Does the increasing demand for oil from China and India explain the increase in prices when you examine worldwide production versus consumption?

Crude oil demand in China and India continues to grow, mainly because of strong economic growth, relatively low demand base, low energy efficiency, and government subsidies. The demand growth was the main reason that crude oil price more than doubled between 2003 and 2006, but I think it is very unrealistic to think that it was the reason for doubling the price in the last 12 months.

The sharp decline in the value of the US. dollar against major currencies, especially the euro, helped mitigate some of the impact from soaring crude oil prices on those countries with stronger currencies. There are clear signs that the sharp rise in crude oil prices is beginning to strain the Chinese and Indian economies, especially with soaring food prices, which are causing social unrest in the two countries. Although economic growth in both countries is expected to continue, the growth is likely to moderate significantly going forward.

Question # 3

What roles have major investment banks, commodity index funds, and other speculators played in the increase in oil prices?

I firmly believe that major investment banks, commodity index funds, and other financial speculators have played a key role in the current crude oil price bubble. Electronic trading volumes on the NYMEX, the Intercontinental Exchange (ICE), and other smaller exchanges have grown significantly in the last five years. The current trading volume in oil future is more than 12 times world crude oil consumption, and long positions are more than 40 days of world oil consumption.

Investment banks trade crude oil futures for commercial customers as well as financial players including; hedge funds, mutual funds and pension funds, as well as in their own account using their equity capital. Some large investment banks also own energy assets, including refineries, pipelines, and storage facilities, which qualify them as commercials. That is in part how Enron managed to manipulate the California energy market.

Large investment banks trade crude oil futures as agents for their clients and as principals in their own account. They are also clearing houses for other crude oil trading firms. They also trade securities, currencies, and interest rates, and all their derivatives. They also provide merger, acquisition, fairness opinions on deals. Combining all these financial services with crude oil trading raises serious conflict of interest issues, I believe, and a difficult challenge for regulators.

Question # 4
How much of the price of oil currently is a risk premium attributable to political instability in places such as Iraq, Iran, Nigeria, and Venezuela versus price hikes driven by financial speculation?

Political instability has been the norm, not the exception, for the oil industry for decades, but became more prominent since the invasion of Iraq. Even at the peak of the sectarian violence in Iraq, crude oil production was not disrupted and has averaged close to 2 million barrels/day in the last three years.

Security issues in Nigeria and occasional violence have been going on since the end of that country's civil war 40 years ago. Nigeria's shut-in crude oil production volume has averaged 400,000 barrel/day in the five years. Iran has been in the U.S. cross hairs since the hostage crisis in 1979 and more prominently in recent years over its nuclear program.

Financial speculators continue to spread fears of potential supply disruptions in the event of air strikes against Iran's nuclear facilities. However, since Iran needs crude oil export revenues more than the world needs its oil, it is highly unlikely than the Iranian government, even in the event of such military action, would stop crude oil export. I think it is also unlikely that any military action would target Iran oil facilities, but most likely be aimed at a regime change. Despite economic sanctions on one side and record oil export revenues on the other side, Iran oil production has not changed meaningfully in the last five years.

Venezuela, in my opinion, has been a case of poor diplomacy and gross misunderstanding between the U.S. and the Chavez government. It is the fourth largest oil exporter to the U.S. and has a large refining capacity in the U.S. Despite continued verbal attacks by President Chavez on the U.S., and the expropriation of oil assets owned by foreign companies, including those of ConocoPhillips and ExxonMobil, the U.S. likely will remain Venezuela's largest oil export market. Venezuela's crude oil production fell from over 3 million barrels per day before the general strike in September 2002, to less than 2.5 million barrels today, almost 500,000 barrels below its current OPEC quota. The situation in Venezuela has not changed in the last six years. Normalizing relations with Venezuela could increase access to its energy resources and boost its oil production and exports to the U.S.

It is my view that there was no material change in oil production in any of the four countries—Iraq, Iran, Nigeria, and Venezuela—that had any meaningful impact on oil prices in the last 12 months.

Question # 5
Is the weak U.S. dollar a contributing factor to high prices of oil? If so, is the price of oil being exacerbated by speculation in derivatives which link the dollar to oil prices?

There is an almost perfect inverse correlation between the weakness in the U.S. dollar, especially against the euro, and crude oil price. I think of the $65 per barrel surge in crude oil price in the last 12 months, $10-$15 may be attributed to the weak dollar. This inverse correlation has exacerbated speculation in derivatives that link the dollar to oil prices, and the large investment banks are also the largest traders in derivatives.

Question # 6
While you recognize the importance of futures trading to hedge price risk in commercial transactions such as oil shipping, you have also called for greater transparency, curbing excess speculation, and preventing potential conflicts of interest and abuses by traders. What are the key policy changes you would recommend to Congress?

The globalization of the financial markets has been a double-edged sword. It improved efficiency, opened new markets and introduced new financial products. It also increased trading volumes significantly and made it more difficult for government agencies to sufficiently monitor and effectively regulate global trades, which allowed more abuse by financial speculators. They have more sophisticated tools at their disposal than government regulators, and the gap is growing.

Because of the global nature of the financial markets, any efforts to regulate them must be coordinated between government agencies around the world. Regulators in the U.S., Europe, Japan, and even China, if possible, must co-operate in enforcing trading rules in order to put an end to excessive speculation, which has benefited a few at the expense of many.

- Seek international cooperation on regulating oil futures exchanges.
- Raise the margin requirement to 50%, similar to that required on stocks.
- Bar companies operating in the U.S. from trading oil futures on exchanges not in compliance with U.S. regulations.
- Set trading volume limits by commercials in relation to physical needs.
- Limit trading by financials to a percentage of the commercial volume.
- Bar investment banks and other financial traders from owning energy assets.
- Separate crude oil trading from other trading and investment services.
- Require full disclosure by investment banks of oil trading results.
- Impose stiff penalties, including prison terms, on violators.

Question # 7
Last year you testified before a U.S. Senate Committee in support of raising the current margin for oil futures to 50 percent of the value of the trade. Would this action reduce oil prices? Would this curb speculation? Would this action drain liquidity from the futures market to the point that they would still be able to serve their purpose?

I do believe that raising the margin requirement, on financials, not commercials, to 50% is a critical first step in the right direction to end excessive speculation, but it has to be universal and must be enforced by other governments.

I believe successful implementation of global crude oil trading regulation would significantly curb speculation and could burst the current oil price bubble. Once speculators see that the game is over, they are likely to dump their long positions, which would exacerbate the drop in crude oil prices. They could make a huge profit, but it would likely be their last.

I don't believe that oil future markets will be negatively impacted by more restrictive rules on trading by financial speculators. It would reduce volatility and provide commercial traders with more transparency and a true picture of supply and demand and help them better manage oil price risk. Oil exchanges, in my opinion, have become licensed global gambling halls.

I believe the role of financial intermediaries should be limited to facilitating oil trades, and not to participate in oil trades as principals, or link oil trades with financial derivatives, which could exacerbate price volatility and increase the risk to commercial traders. The oil markets behaved more rationally before the oil exchange was established 25 years ago, and there is no reason to think that tighter regulation would do any harm to anyone but the speculators.

Question # 8
Would the benefits from raising the margin outweigh the costs to commercial hedging activity by buyers and sellers?

The margin requirement should be raised only on financials, not commercials. Raising the margin requirement would disadvantage speculators, and benefit commercials whose primary objective is to manage risk, not necessarily make a profit. The primary objective of a financial speculator who trades oil futures is to generate superior returns relative to other investment options and the more volatility, the higher the risk and the returns.

Question # 9
What are your views on the practice of the Commodity Futures Trading Commission (CFTC) to exempt from its regulation the trading of derivatives for U.S. benchmark crude oil on Foreign Boards of Trade, if the foreign regulator does not provide oversight at least as rigorous as the CFTC?

The Commodity Futures Trading Commission (CFTC) has no jurisdiction over foreign trading of derivatives. The reinforcement efforts must be coordinated among governments in the U.S., Europe and Japan, and universally regulated. I don't believe that any unilateral action by the U.S. is likely to yield the desired results, unless companies operating in the U.S. are barred from trading oil futures on exchanges not sanctioned by U.S. regulators. Regulations must be airtight in order to be effective, and all loopholes must be closed in order for this goal to be achieved.

Question # 10
Should there be greater transparency with respect to bi-lateral trades conducted off exchange for crude oil and other energy commodities?

Investment banks and other financial firms must be required to disclose their oil futures trading results. Full disclosure should be an integral component of any future energy trading regulation. More disclosure and transparency are steps in the right direction. Companies that operate within the law and have nothing to hide should have no objection to more disclosure. Hiding behind proprietary trading programs is an excuse and a smokescreen not to disclose trading information. I believe bi-lateral trades conducted off the exchange for crude oil and other energy commodities should be subject to full disclosure and transparency.

Mr. STUPAK. Thank you, Mr. Gheit.
Mr. Diwan?

STATEMENT OF ROGER DIWAN, PARTNER AND HEAD OF FINANCIAL ADVISORY, PFC ENERGY

Mr. DIWAN. Thank you and good morning. I would like to concentrate today my remarks on the structural changes really that have occurred in the last few years in the oil market and how the mechanism of oil price recovery have shifted from the physical to the financial world.

If you can pull my first slide, please.

As you can see, actually, prices have moved in a narrow band until 2003 and were largely determined by the level of inventories. The main reason for this narrow band was due to the existence of a very large amount of unused capacity within OPEC, what we call in our jargon "spare capacity."

The system broke down in 2003, first and foremost because the world basically faced two consecutive shocks: a supply shock in 2003 when problems in Venezuela, Nigeria, and Iraq reduced supply; followed by a demand shock in 2004 when global demand increased by over 3 million barrels per day. These two combined forces basically wiped out all the remaining spare capacity within OPEC and left only an estimated 2 million to 2.5 million barrels of cushion, most of it in Saudi Arabia.

During that time, the benchmark, WTI, doubled from $35 to $70, as the world started to adjust to this concept of low spare capacity. The other important phenomenon during that period was the lack of growth in crude supply from non-OPEC countries despite the price rise. It is that fact that has really cemented the fundamental shift in perception from an era of plenty to an era of scarcity.

This era of scarcity is now defined by a supply narrative that is firmly established in the oil market and, in particular, among the financial players. It is, in fact, that narrative that helped usher in what I call the "financialization" of oil markets.

This "financialization" can be seen in three key developments between 2003 and 2006, all of them pointing to the fact that oil price discovery moved from the physical to the paper market.

The first one is a dramatic increase in importance of the financial player in oil futures, with a multiplication by five of the number of financial companies trading on NYMEX and the rapid takeoff of the ICE exchange. As their number grew, their weight grew. And we have seen an increase in liquidity and money inflow.

And, actually, during that first phase of financialization, we saw a very strong correlation between the net inflow of money to the futures and the oil prices. In the second phase, the financial player grew to become more sophisticated. And we saw another correlation between basically the net length of the noncommercial and oil prices.

Clearly, the most troubling issue has certainly been the doubling oil prices in the last 10 months. And to understand that, we need to understand that, since August 2007, oil has become the hedging instrument against the weakening dollar and rising inflation.

If you can see my second slide, please.

And what happened basically is, as the U.S. Fed started to ease monetary policy in September 2007 with zero interest rate cuts, the U.S. dollar weakened. As the dollar weakened, dollar-priced oil has emerged as natural hedge, not unlike gold. And we have a very strong negative correlation between oil and the dollar.

So how did we get to the point where oil became a hedging tool, a new asset class, and not just the price of a commodity? The combination of increased liquidity, new players, and new instruments, such as the index funds, have allowed oil to become another asset class used by portfolio managers.

By having oil futures and index funds as part of the portfolio of asset classes available to them, we have created linkages with the rest of the financial instruments and opened oil to be used as a hedging mechanism. So now oil prices are very much driven by what I call the macro fundamentals, such as interest rates, currency rates, or inflation expectation, through these portfolio effects as much as by the oil fundamentals, which are traditional supply and demand analysis.

The instruments of choice for this transmission between oil and macro fundamentals are the commodity index funds. These index funds have become the primary tool for hedging, investing, or speculating commodities. They now represent the single largest component for futures.

It is undeniable that the lack of position limits for these index funds has created the useful backdoor, allowing the financial community to invest more money in oil futures than the regulators intended originally. And since they are used to hedge potentially much bigger markets, like currencies, they have room to continue to grow.

Now that oil has in effect become a new asset class, we should make sure to have the right regulatory framework and make sure that we do not give incentives to invest in one asset class over the other, be it through regulatory loopholes or a lower transaction cost such as the margin calls.

Thank you.

[The prepared statement of Mr. Diwan follows:]

Testimony of Roger Diwan
Partner at PFC Energy
1300 Connecticut Av, NW
Washington DC 20010

Before the United States House of Representative
Sub-Committee of Oversight and Investigation
Committee on Energy and Commerce

Regarding

Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? Part II

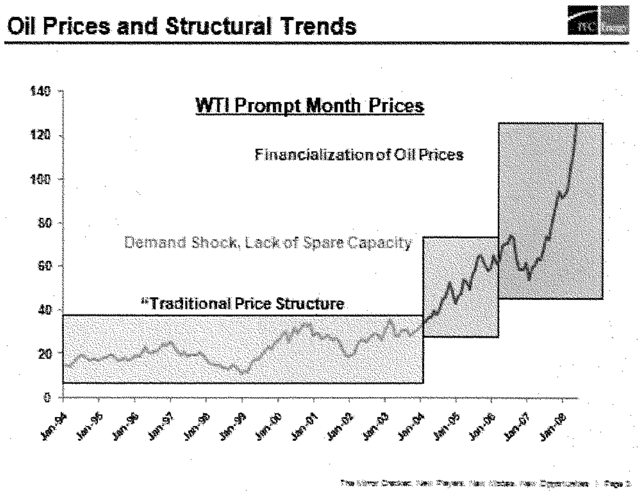
Monday, June 23, 2008 11:00 a.m.
Room 2123 Rayburn House Office Building

My name is Roger Diwan.

I want to thank the committee for inviting me to testify on the important issue that is the subject of today's hearings.

I have been analyzing and forecasting crude oil markets for the past 15 years and have extensive contacts with oil companies, national oil companies, service companies and on Wall Street and within the hedge fund community. It is important that you know that I never traded commodities and that I am not representing any corporate, financial, or lobby organizations. I am speaking with you as an expert who has spent most of my professional career analyzing crude oil markets, both physical and paper markets, and hope to bring some perspective and background to today's discussions.

I would like first to explain how I view oil price formation in the last ten years, and how a number of structural changes have led to what I call the financialization of oil markets in the last 2 years or so. In the graph below, I define three distinct periods in the oil market, with price formation going through a number of structural shifts:



The traditional price structure that prevailed through 2004 was when oil analysts like myself spend their time looking at the supply and demand fundamentals in great detail with the ultimate goal to forecast changes in inventories levels, mostly in the United States. During that time, a very strong correlation existed between stock levels and prices, and forecasting changes in stocks reasonably well was the ultimate goals of most analysts. As you can also see, prices moved in a narrow band, largely due to the fact that OPEC had a very large amount of unused capacity to produce crude oil, what we call in our jargon "spare capacity." It meant that oil markets expected to see OPEC increasing production every time stocks were low, by just opening the spigots. The internal dynamics in OPEC meant that every time prices were rising, any of the countries with spare capacity had the incentive to increase production by cheating on their assigned quotas. This global spare capacity was extremely large (10 mmb/d) in the mid 1980's. Over the course of the next fifteen years, low prices, strong demand growth and lack of investment gradually eroded this spare capacity. Simply put, the roots of the bull market are deep, and long-term solutions are required to address long-term problems.

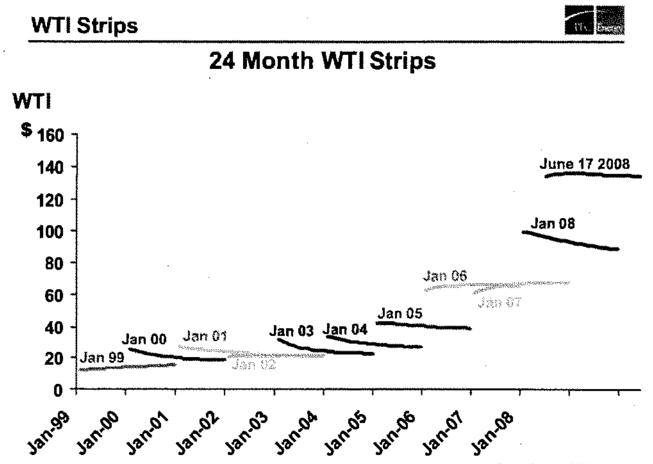
This process accelerated dramatically in 2003-2005 when the world basically faced two consecutive shocks: a supply shock in 2003 when problems in Venezuela and Nigeria as well as the interruption in Iraqi exports reduced supply, followed by a **demand shock in 2004**, when global demand increased by close to 3 million b/d. These two combined forces wiped out most of the remaining spare capacity within OPEC, and left only an estimated 2 to 2.5 million b/d of cushion, most (if not all) of it in one country, Saudi Arabia. During that time, the benchmark WTI price doubled, from $35 to $70 as the world adjusted to this new reality. As will be discussed later, one aggravating factor was that opportunities available to international oil companies to invest capital to replace natural decline and create new production capacity were generally scarce as the gate keepers of the most prolific basins generally restricted access Thus, the opportunities that investors have been able to capture have suffered from relatively high costs and lower productivity.

As oil markets learned to live with low spare capacity, and with the lack of new supply coming from Non-OPEC to force OPEC to shut in some spare capacity, a new reality has emerged: Oil markets, when facing low spare capacity have in effect removed one of the biggest price stabilizers, the ability to add supply quickly when prices rise. In a market without spare capacity, the price risks become one sided: any unexpected news is bullish by definition and this is how we have ended up with a market facing only two types of event risks: bullish and very bullish. We are riding in a car with no shock absorbers, and we feel every bump in the road keenly.

Just as importantly, the lack of spare capacity means that there is little chance that the market will face a punishing action by OPEC to bring prices significantly down. In effect, OPEC as a cartel has lost its ability to control the price ceiling. While some observers might think this would not matter to the organization, the fact is that many members are very concerned by the serious risk of long-term demand destruction for its only product.

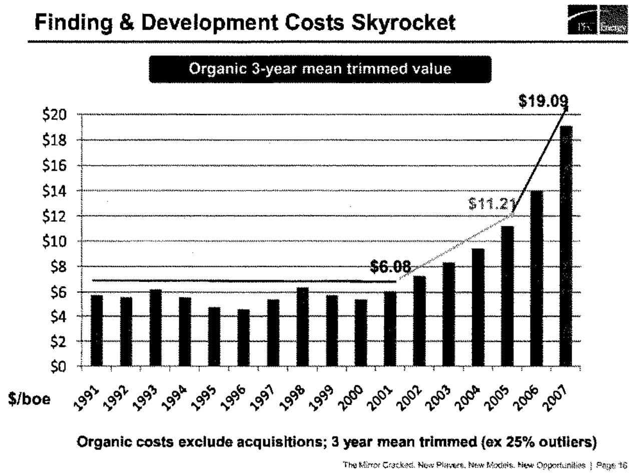
Moreover, since the credit crisis of August 2007, oil prices have doubled. In the meantime, the supply-demand fundamentals have not changed in such a dramatic fashion. Oil fundamentals have remained supportive of prices: despite the slowdown of the US and European economies, global oil demand has stayed robust thanks to Chinese and Middle Eastern growth. More importantly, there has been virtually no change in oil supply from Non-OPEC countries, despite numerous forecasts expecting strong growth in 2008 and 2009. Delays of new projects, stronger declines rates across the globe and very disappointing production profiles in Russia and Mexico have created a very strong narrative in the market that oil supply is just not here, and that non-OPEC countries have reached a peak in production. It is certainly not a foregone conclusion, but we are in the 6th year of price rises, and supply has remained fairly stagnant.

This supply narrative is the key reason for another structural change in oil prices: the long term prices for oil have shifted significantly upward. In thinking about prices, it is helpful to differentiate between short-term prices, which tend to be fairly volatile and responsive to changes in production and inventories, and long-term values, which have tended to respond to investment levels, marginal costs, and beliefs surrounding limits to production and the longevity of the cycle. For many years, no matter what the near-term price of oil, the long-term price expectation was extremely stable. Around 2006, oil markets began to put a high value on long dated oil as evidenced by a slight contango and much higher prices for long dated crude. Normally oil in the out years is priced lower than oil in the current periods reflecting the cost of money and the cost of oil storage, which is called backwardation (see graph below). But now the combination of a an Asian demand narrative (China and India will need more oil), combined with the supply narrative (no new capacity in the medium term, and Peak Oil theory after that) has provoked a fundamental shift in the price structure: while prompt prices started to increase, the long dated prices increased even more, creating a gentle contango (meaning oil prices are starting to get higher in the out years than the near contract).



Financial Services - PFC Energy | Page 1

This shift in perception is the fundamental reason behind the price increase seen in the last few years. And as prices increased, the industry has stepped up investments in upstream activity. The development budgets of oil companies have soared, but this renewed activity has also created tremendous cost inflation. After all, low oil prices since the mid 1980's have forced the industry to shrink and delay investments as profitability went down. Accordingly, the capability of the service sector, which represents those companies that actually carry out the drilling and building activities for the oil companies, downsized to fit this diminished activity level. Now, those service companies are being asked to do much, much more. In short, the price boom has now created a rush to invest, and now, equipment, people and projects are scarce, so costs have soared. As you can see below, the Finding and Development costs (that is, the cost for the company to access, explore, develop, and deliver a barrel of oil to the market) for the largest oil companies have skyrocketed in the past three years. Most new projects now require a price of $70 to $90 dollars to be profitable (to get there, you need to look at F&D costs of marginal projects, and multiply it by three to get the oil price required to get a return of about 10%). It is also critical to note that even when spending money heavily on these expensive barrels for future production, some of these companies have not been able to add as many barrels into their reserve base as they have removed via production. In other words, the barrels are expensive and still the global oil industry is sometimes unable to replace 100% of production.


Finding & Development Costs Skyrocket

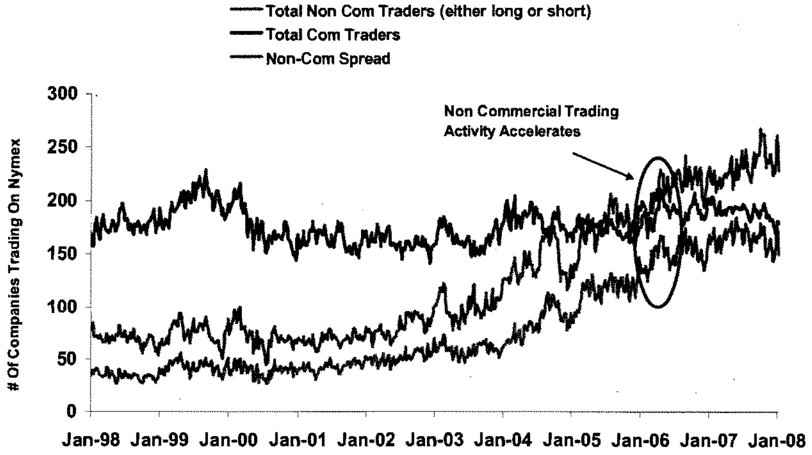
Organic costs exclude acquisitions; 3 year mean trimmed (ex 25% outliers)

The Mirror Cracked. New Players. New Models. New Opportunities | Page 16

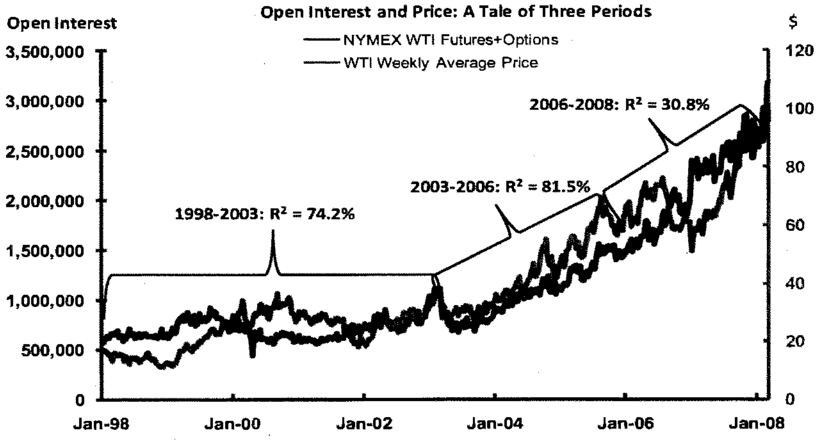
In terms of the fundamentals, it is clear that higher oil prices were needed to attract capital to the industry in order to boost investments. Investments have been depressed in the last 15 years as the world was living off the capacity created in the last oil boom, and the large spare capacity that OPEC was willing to maintain. In a way, the demand in the last 20 years was met by OPEC turning on the spigots of existing infrastructure and by efficient investments in countries opening to investment to gain revenue in a time of low prices. Now, we have to invest for every new barrel we want to bring on, and for that we need an investment super cycle.

The Emergence Of Oil As A New Asset Class: Financialization Of Oil

As these fundamentals unfolded, another key shift occurred, what I call **the financialization of oil market:** as the OPEC threat of ramping up production has been removed as a significant factor in oil markets, a whole set of new actors have been drawn into the futures markets, and started looking at the fundamentals of supply and demand in a new way: slowly but surely, oil markets have become an attractive area for investments for a number of financial players. Between 2003 and 2008, we have seen the number of or financial companies on NYMEX increase from around 50 to over 250 (see graph below), and this does not include the firms that uses index funds.



During the early phase of this financialization, between 2003 and 2006, we saw a very strong correlation between Open Interest on NYMEX and oil prices. During that period, it is that indicator, the flow of money to the futures market that became the key element to predict prices, with a correlation close to 80%. Clearly, the fundamentals described above, the supply then demand shock, and the lack of spare capacity enticed a lot of players to come into the oil market. In a sense, these financial players understood what was happening to the supply/demand balance and have bet – correctly – that prices would have to move up and that consumers would be willing to pay higher and higher prices without significantly altering their usage patterns.

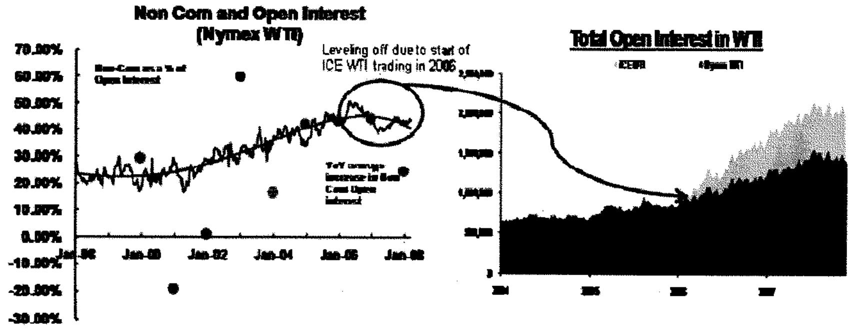


Starting in 2006, the open interest and price correlation rapidly broke down as non commercial trading picked up, bringing into the market an increasing number of financial firms playing out multi-pronged trading strategies.

As the market grew to become more sophisticated, the key determinant of prices, or more precisely the key correlation that provided the best explanation of oil price behavior was the non-commercial net length (the difference between aggregate gross longs and gross shorts) and that strong correlation lasted through the Middle of 2007, until the credit crunch of August 2007. Please understand that this is a correlation; causality, on the other hand, is difficult to pin down and works in both directions. It is also important to note that the behavior of non-commercials can, at times, force the price to drop precipitously, as it did in January 2007. This downward move was occurring in an environment in which fundamentals were actually putting upward pressure on prices as inventories slowly came down from their bloated status in the summer of 2006.

To summarize, crude oil markets have gone through a transformative period since 2003, with the flow of money and the behavior of the non-commercials providing the key explanation for oil price behavior. That has been made possible by dramatic changes in the structure of the supply-demand fundamentals, which is the disappearance of spare capacity and the enormous rise in the marginal cost of supply (discussed above). This transformative period has added a lot of depth and liquidity to oil futures, which used to be small and largely illiquid markets that only few firms used prior to that.

Interestingly enough, non-commercial trading has steadily increased its share of total open interest on Nymex, until 2006, when it started to level off. This leveling off correspond to the launch of the Intercontinental Exchange (ICE) which does not publish data on the activities of the different categories of investors. In effect, by allowing ICE to abide by less stringent disclosure requirements, a regulatory arbitrage was created, allowing financial players to keep trading strategies hidden from CFTC disclosure requirements. (See graph below).



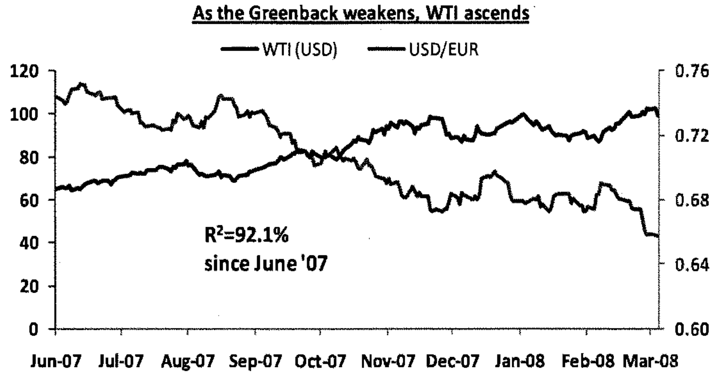
Oil as a Global Hedge

Probably more troubling has been the doubling of oil prices in the last 8 months. Since August 2007, and thanks to the liquidity created in the future markets in the past three years, oil has become a hedging instrument against the weakening dollar and rising inflation. Let me explain how this cycle has been created:

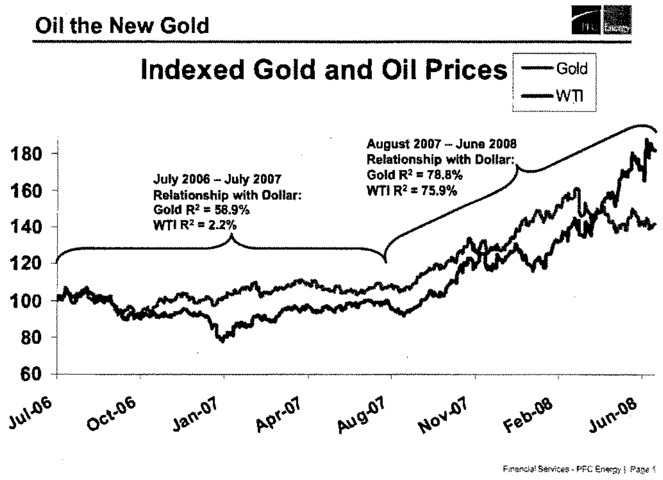
The credit crunch that emerged last summer in the US has had an indirect impact on oil prices. At an even more basic level, however, it has been the disequilibrium in the US economy and the concomitant trade, savings, and fiscal deficits that have driven oil prices. This is what I call the "macro fundamentals" of oil, in contrast to the "oil fundamentals," which are our traditional supply and demand analysis.

The linkage between oil and US dollar works the following way:

- As the US Federal Reserve started to ease monetary policy in Sept. 2007 with a series of cuts in the short-term interest rates, dollar-denominated assets became less attractive to investors, prompting them to higher yielding assets, which weakened the dollar.
- As the dollar declined, oil has emerged as a natural hedge to the dollar, and there is a very strong negative correlation between oil and dollar. Since this summer, the movement of oil prices and US dollar are strongly linked, with the weakness of the dollar driving the strength in oil prices. In the last 8 months or so the coefficient of correlation is close to 90% (see below). Before 2007, WTI price and the US dollar were not correlated. From 1999-2007, the coefficient of determination was only 44.1% between the USD/EUR exchange rate and WTI price.
- Investors fleeing the lower-yielding dollar moved funds into oil futures, which were being viewed as a relatively higher-yielding financial instrument, buoyed by a surge of global capital flow. Additionally, oil futures bought and sold in dollars became more attractive to foreign investors as the dollar further weakened against such investors' home currencies. These financial market dynamics resulted in a dramatic alignment between dollar and oil price movements.



Moreover, as oil prices increased and inflation expectation started to increase, that further reinforced oil as a hedge against inflation. So since last summer, oil has taken the role that gold has traditionally played. And if you look at the correlation, gold and oil have moved in the same proportion against the dollar. (See graph below)


Oil the New Gold

Indexed Gold and Oil Prices

July 2006 – July 2007
Relationship with Dollar:
Gold R^2 = 58.9%
WTI R^2 = 2.2%

August 2007 – June 2008
Relationship with Dollar:
Gold R^2 = 78.8%
WTI R^2 = 75.9%

Financial Services - PFC Energy | Page 1

Increasing Money Supply Adds a New Twist

With credit markets still in the throes of the subprime mortgage meltdown, the Federal Reserve has been attempting to breathe new life into markets by expanding its traditional lending facilities available to financial institutions.

The mechanism underlying the new available credit facilities have been implemented using government repurchase agreements, which "sterilize" the fed's intervention and theoretically limits their impact on inflation and exchange rates. However, aggregate money supply has seen a sharp increase since monetary easing began last fall. The unintended consequence of increasing the money supply has lead to a further injection of liquidity in markets that are already flush with new capital flows, such as oil and gold.

How Oil Has Become A New Asset Class?

The key element of the financialization of oil markets, and their correlation (positive or negative) comes from the fact that oil now acts as another asset class for a wide variety of asset managers, pension funds, endowment and hedge funds. These investors are making broad asset allocations decisions, and investing in the commodity directly (as opposed to the more traditional oil and gas equity allocation) and their incentive stems from a number of factors:

- If one believes in the broad Asian demand narrative, it is easier to invest in the commodity directly since it is difficult or impossible to invest in local companies that would benefit from this growing market.
- If one believes in the supply narrative, investing in the commodity, especially in the long dated months makes a lot of sense.
- If one is looking to hold real commodities that will increase in value in an inflationary world, oil probably makes sense.
- If one is holding assets in dollars, and believes that the dollar will continue to decline, investing in a negatively correlated asset class makes perfect sense.

Thus, if you can invest in the commodity itself as investors have been doing in gold for years, the reasons to invest in oil as a commodity are plenty, and the ones listed above are very basic ones. Plenty more exists, depending on your strategy. The key point here is that once the door has been opened through the commodity indexes, and once you have removed the spare capacity threat that OPEC had, financial players have now another asset class to invest in, speculate or hedge.

Moreover, now we have entered a world where portfolio allocation decisions include commodities, so sometime the sharp moves in oil prices have more to do with changes in asset allocations than pure oil fundamentals. As an example, if a consensus start to emerge in the financial world that US interest rates are set to fall, as it was the case late 2007, a large number of portfolio managers are likely to change their allocations of funds and dedicate a larger proportion to commodities in general and oil in particular. Similarly, if you believe that the European Central Bank is likely to increase interest rates and strengthen the Euro vis-a-vis the Dollar, you will be inclined to increase your exposure to oil futures.

To a large extend, it is these "macro fundamentals" that are now driving oil prices, and the instruments of choice to the financial community are the commodity index funds. Moreover, it is clear that the lack of position limits for these index funds have created a useful backdoor allowing the financial community to invest more money in oil futures than the regulators intended originally. These index funds have become the primary tool for hedging, investing or speculating on commodities. They probably represent the single largest components on oil futures and their sizes have been calculated to be close to $280 billion.

Now that oil has in effect become a new asset class, we should make sure to have the right regulatory framework, and make sure that we do not give incentives to invest in one asset class over the others, be it through regulatory loopholes or a lower transaction costs such as margin calls.

Most frustrating for oil analysts is the lack of transparent data to look at the exact size and flows of the different categories of players on the oil markets. The data released by the CFTC does not allow analysts like me to understand the broad movements by the financial players in the market. The categories used by the CFTC are too broad and are meaningless if you allow the index funds to be categorized as commercials and if you don't break down these categories in smaller and better defined entities. I find it ironical that we constantly require more data transparency from the OPEC producers be it on their production or reserve data but we cannot manage to do the same in our own backyard on one of the most crucial if not the key determinant of oil price formation.

Mr. STUPAK. Thank you. Mr. Masters please, for an opening statement. You'll want to turn on that button there. Make sure the green light's on there. There we go.

STATEMENT OF MICHAEL W. MASTERS, MANAGING MEMBER AND PORTFOLIO MANAGER, MASTERS CAPITAL MANAGEMENT, LLC

Mr. MASTERS. Mr. Chairman and members of the Committee, thank you for the opportunity to testify today on the topic of energy speculation. Commodities futures markets exist solely for the benefit of bona fide physical hedgers, not for speculators. The futures markets provide physical hedgers with two vital functions, price discovery and risk hedging. In fact, producers and consumers in the energy markets priced nearly all spot market transactions at the futures price plus or minus the differential.

As an example, the heating oil distributor buying from their local wholesaler pays the nine max futures price, minus a local differential. That means that when the futures price rises by a dollar, then the spot price will also rise by a dollar. Price changes for energy commodities originate in the futures market and then are transmitted directly to the spot markets. So what happens in the futures markets does not stay in the futures markets.

Index speculators, a group that I define in my written testimony, have driven up futures prices and damaged the price discovery function. Slide one.

Index speculators have poured billions of dollars into the commodity futures markets, speculating that commodity prices will increase. As the slide shows, assets allocated to commodity index trading strategies have risen from $13 billion at the end of 2003 to $260 billion by the middle of March of 2008.

Mr. BARTON. Would the gentleman suspend? Mr. Chairman, could you have the big screen put down?

Mr. STUPAK. We were just talking about that.

Mr. BARTON. Because I can't see that, plus the glare, it's hard to see.

Mr. STUPAK. Kyle, could you we get the big screen down?

Mr. BARTON. Thank you, Mr. Chairman.

Mr. STUPAK. Hang on, Mr. Masters, so we can get it up there and——

We'll get going here. It's on page 5 of Mr. Master's testimony, that same chart if you want to follow along. Mr. Masters, if you want to continue where you left off. Thank you.

Mr. MASTERS. Sure. Thank you.

As you can see from the chart, the prices of the 25 commodities that compose these indices have risen by an average of 183 percent. Index speculators have bought more commodities futures contracts in the last 5 years than any other group. If they had been the largest buyer of futures contracts, is it not reasonable that they would have had one of the largest impacts on futures prices? Importantly, physical hedgers are motivated by only one thing: risk reduction. Producers and consumers only trade futures in order to hedge their actual physical production and consumption. Their trades are always based on actual supply and demand fundamentals that they are experiencing in the real world. Their trading decisions strengthen the price of discovery function.

In contrast, index speculators invest in a broad basket of commodities and therefore do not express a view on any single commodity. They do not trade based on underlying supply and demand fundamentals. Therefore, their trading decisions damage the price discovery function. In fact, if a pension fund decides to allocate $100 million to a commodity index, the $40 million that consequently flows into West Texas Intermediate crude oil has nothing to do with the real world supply or demand for crude oil. Every single WTI futures contract that is traded for any reason other than the supply and demand of physical crude oil is a contract that weakens the price discovery function. In 1998, physical hedgers outnumbered speculators by a 4:1 ratio. Today index speculators are the 800-pound gorilla that dominates the futures markets. Together with other speculators, they now outnumber physical hedgers by a 2:1 ratio.

There are three steps that Congress can take to immediately reduce excessive speculation and strengthen the price discovery function. First, I recommend that Congress convene a panel composed exclusively of physical commodity producers and consumers for every commodity. This panel should set hard and fast speculative position limits at the control entity level. These limits must apply to every market participant whether they directly access the futures markets or trade in the over-the-counter markets through swaps and other derivatives.

Second, the panel should numerically define what exactly constitutes excessive speculation as a percentage of open interest. Third, Congress should eliminate the practice of investing through passive commodity index replication because of the damage that it does to the price discovery function. Another avenue might be found in the Commodity Exchange Act which states, when discussing speculative position limits that "such limits upon positions in trading shall apply to positions held by and trading done by two or more persons acting pursuant to an expressed or implied agreement or understanding the same as if the positions were held by or the trading were done by a single person."

Since index speculators are all acting in express agreement by following the exact same index trading methodology, they should all be collectively subject to the speculative position limits of a single speculator. If this provision of the Commodity Exchange Act were enforced, then the amount of money allocated to index replication strategies would have to drop from the current level of $260 billion to a limit of a single speculator, approximately $4 billion.

In closing it is important to realize that Wall Street is very good at inventing and promoting novel investment strategies. Unfortunately, they are not good at foreseeing the long-term consequences of the instruments that they create. The recent subprime debacle which has now grown into a worldwide financial crisis shows us where unbridled financial innovation can lead.

This concludes my testimony.

[The prepared statement of Mr. Masters follows:]

Testimony of

Michael W. Masters
Managing Member / Portfolio Manager
Masters Capital Management, LLC

before the

Committee on Energy and Commerce
Subcommittee on Oversight and Investigations
United States House of Representatives

June 23, 2008

Mr. Chairman and Members of the Committee, thank you for the opportunity to testify today on the topic of "Energy Speculation." I testified in front of the Senate Homeland Security and Governmental Affairs Committee on May 20th of this year on a substantially similar issue.[1] In that testimony I shared many observations and statistics related to the general phenomenon of Index Speculation in the commodities futures markets. Today I would like to build on that testimony and look specifically at the damage that Index Speculation does to the price discovery function in the agricultural and energy futures markets.[2]

When I use the term Index Speculator, I am referring to Institutional Investors such as Corporate and Government Pension Funds, Sovereign Wealth Funds, University Endowments and others who allocate capital to the 25 key commodities that compose the Standard & Poors - Goldman Sachs Commodity Index (S&P-GSCI)[3] and/or the Dow Jones - AIG Commodity Index (DJ-AIG).[4]

In the last five years, Institutional Investors have adopted the mistaken belief that commodities futures are an investable asset class, similar to capital market investments. They have failed to grasp the essential differences between the commodities futures markets and the capital markets, and do not appear to understand that investing in inventories is vastly different from investing in the means of production.[5]

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[1] http://hsgac.senate.gov/public/_files/052008Masters.pdf

[2] It is instructive to talk about agricultural commodities in conjunction with energy commodities because we observe the same phenomenon of Index Speculator investment in both sectors. Understanding one helps one to understand the other.

[3] http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_gsci/2,3,4,0,0,0,0,0,0,1,1,0,0,0,0,0.html

[4] http://www.djindexes.com/mdsidx/index.cfm?event=showAigIntro

[5] "Put simply, a capital asset is part of a system that has some consistent, expected output that exceeds the owners' consumption needs. It is a component of the means of production. The designation is dependent on the use of the asset, not on its type. My automobile is a consumption good, inappropriate as a store of value for me. The fleet of automobiles owned by a car rental company is a capital asset, designed to produce a constant return over the useful life. Beer is a consumption good for most of us, a capital asset when stored in a brewery or a bar. Capital assets should contribute to a constant, positive return through their part in the output of a business. Money directed toward these assets by shareholders, lenders, sole proprietors and any other participants can be said to be invested. Capital assets can become speculative media rather than investment outlets when they are held in a form in which the only expected return would come from a change in price rather than the generation of an output. Speculative assets promise no output beyond a prospective change in price. . . . Central to the question is whether or not commodity indices, meant to track the price changes in a fairly broad but largely energy related list of commodities are an investment medium that might reasonably constitute an asset class in the manner of common stocks, rental properties, bonds, private businesses or any groups of capital assets from which the owners can expect some positive business output over time. The clear answer is 'no.'" excerpted from pre-publication copy of "The Commodity Question," Michael Aronstein, Marketfield Asset Management, New York, NY.

Commodities futures markets exist solely for the benefit of bona fide physical hedgers, the producers and consumers of actual physical commodities.[6] These markets do not exist for the purpose of speculation.[7] The commodities futures markets provide bona fide physical hedgers with two vital functions: one, a means for price discovery, and two, a means to offset price risk.[8]

Congress clearly understood and appreciated the value of these two vital functions back in 1936 when it passed the Commodity Exchange Act.[9] The Commodity Exchange Act was designed to protect these functions by establishing speculative position limits, thereby preventing what it terms "excessive speculation."[10] While the Commodity Exchange Act does not define this term, it is clear that Congress recognized that unlimited speculation posed a threat to the commodities futures markets and their two vital functions.[11]

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[6] "The fundamental purpose of the measure is to insure fair practice and honest dealing on the commodity exchanges and to provide a measure of control over those forms of speculative activity which too often demoralize the markets to the injury of producers and consumers and the exchanges themselves." Report No. 421, U.S. House of Representatives 74th Congress, Accompanying the Commodity Exchange Act, March 18, 1935.

[7] Some limited speculation in the commodities futures markets provides beneficial liquidity to the primary constituency (bona fide physical hedgers).

[8] "An Important Mission in the Ever-Changing World of Finance," About The CFTC, http://www.cftc.gov/aboutthecftc/index.htm

[9] United States Code Title 7, Chapter 1, Section 5(a) Findings http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+7USC5

[10] The commodities futures markets are completely free markets for bona fide physical hedgers - they face no restrictions.

[11] "It should be our national policy to restrict, as far as possible, the use of these exchanges for purely speculative operations." President Franklin D. Roosevelt message to Congress February 9, 1934
"The bill authorizes the Commission . . .to fix limitations upon purely speculative trades and commitments. Hedging transactions are expressly exempted. That this power of the Commission will be exercised judiciously and for the purposes merely of preventing overspeculation and a type of 'racketeering' by a few large professional traders, may be assumed as a matter of course." Report No. 421, U.S. House of Representatives 74th Congress, Accompanying the Commodity Exchange Act, March 18, 1935. Also see previous footnote 6.

HOW THE PRICE DISCOVERY FUNCTION WORKS IN THE AGRICULTURAL AND ENERGY MARKETS

Because commodities are bulky and costly to transport, spot markets for commodities are geographically dispersed. Many decades ago, local markets relied almost exclusively on local supply and demand to determine prices, with the result being that there were sometimes great differences between prices in various regional spot markets.

This began to change in the 1980s, when spot market participants in the agricultural and energy markets moved to embrace centralized futures markets as the best indicator of overall supply and demand conditions across all spot markets.[12] Because of the benefits of price discovery and risk hedging that the futures markets provide to physical commodity producers and consumers, today those participants have agreed to price nearly all spot market transactions at the futures price plus or minus a "local basis" or "differential."[13]

The CFTC describes it this way: "In many physical commodities (especially agricultural commodities), cash market participants base spot and forward prices on the futures prices that are "discovered" in the competitive, open auction market of a futures exchange."[14] Platts, which is the leading pricing service for the energy industry, describes it this way: "In the spot market, therefore, negotiations for physical oils will typically use NYMEX as a reference point, with bids/offers and deals expressed as a differential to the futures price. Using these differentials, Platts makes daily and in some cases intra-day assessments of the price for various physical grades of crude oil, which may be referenced in other spot, term or derivatives deals."[15]

As an example, a wheat farmer delivering his crops to the local grain elevator is going to be paid the CBOT futures price plus or minus the local basis spread. A New England Heating Oil distributor buying heating oil from the local wholesaler is going to be paying the NYMEX futures price plus or minus a local differential. That means that when the futures price rises by $1, if the local basis/differential does not change, then the spot price will also rise by $1, typically the same day.[16]

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[12] "The Structure of Global Oil Markets—A Backgrounder," Platts, A Division of McGraw Hill Companies, July 2007, page 5. http://www.platts.com/Resources/whitepapers/index.xml. Additionally Conversation with Tom Buis, President of National Farmers Union, June 10, 2008

[13] Not all spot commodities are priced this way. This method is used mostly in agriculture for wheat, corn and soybeans, and in energy for WTI crude oil, heating oil, gasoline and natural gas. The basis (in agricultural markets), or differential (in energy markets), is an adjustment to the futures price based on local supply and demand conditions.

[14] "The Economic Purpose of Futures Markets and How They Work - Price Discovery or Price Basing," Commodities Futures Trading Commission Website, http://www.cftc.gov/educationcenter/economicpurpose.html

[15] "Platts Oil Pricing and Market-on-Close Methodology Explained - A Backgrounder," Platts, A Division of McGraw Hill Companies, July 2007, page 3. http://www.platts.com/Resources/whitepapers/index.xml

In the present system, price changes for key agricultural and energy commodities originate in the futures markets and then are transmitted directly to the spot markets. For these commodities, what happens in the futures markets does not stay in the futures markets, but is felt almost immediately in the spot markets.

Physical commodity producers and consumers trust and rely upon the price discovery function of the commodities futures markets to accurately reflect the overall level of supply and demand, pricing their spot market transactions directly off the applicable futures price.[17] For many years, spot market traders have trusted the veracity of futures prices, focusing instead almost exclusively on the local basis / differential in their respective markets.[18]

Unfortunately, this has changed in the last few years. This trust has been betrayed, and many physical commodity market participants are now losing faith in the futures price as a benchmark for their transactions.[19]

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[16] Any classic finance textbook would tell you that futures prices are a derivative of spot prices but we can see here that in fact the opposite is true. Capital markets participants are taught that (1) spot prices are exclusively a function of supply and demand in the spot market (2) futures prices are equal to spot prices plus the cost of carry minus the convenience yield (3) futures prices can only impact spot prices if they impact the supply or demand for that commodity in the spot markets and (4) futures prices must converge to spot prices at expiration. The only one of these statements that is true for these particular commodities futures is that futures and spot prices must converge. But that is only half true, because spot prices can rise to meet futures prices; futures prices do not always have to fall. This whole issue highlights the fundamental lack of understanding that capital markets investors have when it comes to the commodities futures markets.

[17] Other non-exchange traded commodities also price off futures contracts that they closely resemble or with which they have an economic relationship. "Many non-traded commodities price according to the nearest exchange-traded benchmarks - for example, coal to oil, fertilisers to corn and soya - and therefore tend to move in the same direction." GaveKal Research Report, May 27, 2008. This comment was issued in response to people claiming that Index Speculators cannot be driving futures prices because non-exchange traded commodities have risen in price. http://ftalphaville.ft.com/blog/2008/05/27/13338/commodities-spiral-are-speculators-to-blame/ also see http://gavekal.com/forum3/default.aspx?f=2&m=2848

[18] I have had numerous conversations with spot market traders of physical crude and crude products as well as participants in the grains markets. I would encourage Congress to reach out to participants in these spot markets in order to understand how the pricing mechanisms work. I can supply an extensive list of contacts to assist in this effort if needed.

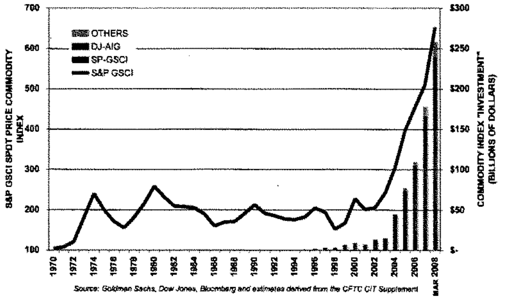
[19] One needs look no further for a sampling of physical commodity producers and consumers questioning the price discovery process than the Agricultural Forum that the CFTC hosted on April 22, 2008 - http://www.cftc.gov/newsroom/cftcevents/2008/oeaevent042208.html

INDEX SPECULATORS HAVE DRIVEN FUTURES AND SPOT PRICES HIGHER

Index Speculators have poured billions of dollars into the commodities futures markets, speculating that commodity prices will increase. Chart One shows assets allocated to commodity index trading strategies have risen from $13 billion at the end of 2003 to $260 billion as of March 2008,[20] and the prices of the 25 commodities that compose these indices have risen by an average of 183% in those five years![21]

CHART ONE

COMMODITY INDEX INVESTMENT COMPARED TO S&P GSCI SPOT PRICE COMMODITY INDEX



Source: Goldman Sachs, Dow Jones, Bloomberg and estimates derived from the CFTC CIT Supplement

It is important to remember there is only one thing that causes prices to rise in futures markets: buy orders. When a trader sends a buy order to the exchange floor or presses the "buy" key on their trading terminal, if he or she is attempting to buy more contracts than are currently offered for sale at the market price, then the market price will rise.[22] As a hypothetical example, if there are 50 WTI Crude Oil contracts offered for sale at $135.10 and another 50 WTI Crude Oil contracts offered for sale at $135.15 then a buy order of 100 contracts will result in the price moving up from $135.10 to $135.15.

Please note that ***who*** initiates a buy order and ***why*** they initiate it are irrelevant when it comes to explaining an order's impact on market prices. Almost all trading is anonymous and a trader's underlying motivation is generally not known to his fellow traders. A 100 contract buy order from a bona fide physical hedger locking in input costs will have the exact same price impact as a 100 contract buy order from an Institutional Investor trying to allocate into commodity futures. 100 contracts is 100 contracts and demand is demand, regardless of who is initiating the buy orders and why they are initiating them.[23]

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[20] "Investing and Trading in the GSCI," Goldman, Sachs & Co., June 1, 2005 and calculations based upon the CFTC Commitments of Traders Report, CIT Supplement, see the Appendix of my May 20th testimony for more information on how to calculate Index Speculators' positions: http://hsgac.senate.gov/public/_files/052008Masters.pdf

[21] Footnote 6 from my May 20th Testimony has a table showing the individual performance of all 25 commodities in the indices: http://hsgac.senate.gov/public/_files/052008Masters.pdf

[22] Some commentators have observed that for every buyer there is a seller, implying somehow that prices will not move because one cancels out the other. If that were the case, then prices would never move. As it stands, every transaction ever recorded in history necessarily included both a buyer and a seller. In January of 2000 the price of Yahoo common stock traded above $120 per share. In October of 2001 the price of Yahoo common stock traded below $10 per share. In every one of these transactions there was a buyer and a seller.

Table One shows that Index Speculators have bought more commodities futures contracts in the last five years than any other group of market participants.[24] If Index Speculators have been the largest buyer of futures contracts, is it not reasonable to assume that they have had the largest impact on futures prices?

TABLE ONE[24]	**2003 LONG OPEN INTEREST**			**2008 LONG OPEN INTEREST**			**PURCHASES LAST 5 YEARS**		
	PHYSICAL HEDGER	TRADITIONAL SPECULATOR	INDEX SPECULATOR	PHYSICAL HEDGER	TRADITIONAL SPECULATOR	INDEX SPECULATOR	PHYSICAL HEDGER	TRADITIONAL SPECULATOR	INDEX SPECULATOR
COCOA	71,300	5,673	2,710	50,243	72,866	29,527	-21,056	67,193	26,817
COFFEE	38,378	12,197	5,671	41,159	56,866	63,133	2,781	44,669	57,463
CORN	227,612	54,123	51,139	505,627	300,017	441,197	278,016	245,894	390,057
COTTON	52,529	23,633	9,518	91,820	77,132	114,804	39,291	53,499	105,286
SOYBEAN OIL	76,717	33,449	3,272	104,064	48,619	72,287	27,348	15,169	69,015
SOYBEANS	98,696	58,567	13,733	141,375	132,849	194,391	42,679	74,282	180,658
SUGAR	95,610	31,143	45,931	359,427	180,670	411,510	263,817	149,527	365,579
WHEAT	24,846	25,698	33,960	58,484	66,958	218,191	33,639	41,260	184,231
WHEAT KC	32,759	4,955	10,526	35,629	31,201	30,299	2,870	26,246	19,773
FEEDER CATTLE	3,864	5,238	2,641	5,117	16,208	9,279	1,253	10,969	6,637
LEAN HOGS	5,316	7,377	15,517	29,366	33,374	105,228	24,049	25,997	89,711
LIVE CATTLE	19,820	40,864	20,021	27,898	51,798	135,451	8,078	10,934	115,429
WTI CRUDE OIL	433,028	56,629	108,599	1,161,063	203,280	606,176	728,035	146,651	497,577
HEATING OIL	69,363	14,063	26,217	65,851	27,972	83,008	-3,512	13,909	56,791
GASOLINE	44,252	20,698	25,555	83,826	41,534	78,692	39,574	20,836	53,137
NATURAL GAS	397,488	21,734	29,774	480,964	77,462	214,641	83,476	55,728	184,867
TOTAL	1,691,579	416,042	404,785	3,241,915	1,418,805	2,807,813	1,550,337	1,002,764	2,403,029

Figures derived from data from Goldman Sachs, Dow Jones, Bloomberg, CFTC Commitments of Traders report and the CFTC CIT Supplement. Non-Directional Spreads and Non-Report (Unclassified) Positions are not shown. Traditional Speculators accessing the futures market through the "swaps loophole" are still classified as Physical Hedgers because the CFTC does not distinguish.

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[23] Comments by regulators that speculators do not move prices, are price-takers not price-makers, et cetera, are patently absurd. If speculators cannot move prices, why do we have any speculative position limits? Why do we have a regulator? It begs the question why a regulator would be determined to convince the public that the group they are supposed to regulate poses no threat to the marketplace.

[24] The figures in Tables One, Two and Three do NOT include single commodity swaps that speculators use to access the futures markets through the "swaps" loophole. We have seen unofficial figures that lead us to believe that a large fraction of commercial open interest in the NYMEX WTI crude oil contract actually represents speculative swap positions. Although NYMEX has these exact numbers, they have presently not released them to the public.

Below is a small sample of what Wall Street analysts have had to say about Institutional Investors driving up commodities futures prices:

> "A Tidal Wave of Fund Flow - Despite the economic gloom many commodity prices hit new highs in recent weeks, driven largely by investment inflows."[25]
> *Citigroup - April 7, 2008*

> "Without question increased fund flow into commodities has boosted prices."[26]
> *Goldman Sachs[27] - May 5, 2008*

> "We have argued recently that some of the price buoyancy during Q1 reflected financial flows and investments in oil and other commodities. . . . Our study indicated that for every $100 million in new inflows, WTI prices increase by 1.6%. . . . Our conclusion for this study is that we are seeing the classic ingredients of an asset bubble."[28]
> *Lehman Brothers - May 29, 2008*

> "The entry of new financial or speculative investors into global commodities markets is fueling the dramatic run-up in prices"[29]
> *Greenwich Associates - May 2008*

It is clear to Wall Street from their vantage point that Institutional Investors pouring billions of dollars into the commodities futures markets have greatly influenced prices. The reality is that the effect of Index Speculators has been so great that they have actually altered the price discovery dynamics in today's futures markets.

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[25] "Great Bulks of Fire IV," Citi Commodities Strategy, Alan Heap and Alex Tonks, April 7, 2008, page 1.

[26] $100 oil reality, part 2: Has the super-spike end game begun?," Goldman Sachs Global Investment Research, Arjun N. Murthi, Brian Singer, et al. May 5, 2008. page 12.

[27] Goldman Sachs, together with Morgan Stanley, are the two largest purveyors of commodity index swaps followed by J.P. Morgan and Barclays. Source: "The Global Commodities Boom," Greenwich Associates, Andrew Awad, Woody Canaday, et al., May 2008, page 1.

[28] "Oil Dot-com," Lehman Brothers Energy Special Report, Edward Morse, Michael Waldron, et. al., May 29, 2008, page 3.

[29] "Financial Investors Fueling Commodities Boom," Greenwich Associates, Andrew Awad, Woody Canaday, et al., May 2008, page 1.

INDEX SPECULATORS DAMAGE THE PRICE DISCOVERY FUNCTION OF THE COMMODITIES FUTURES MARKETS

Bona fide physical hedgers are motivated by one thing - risk reduction. Physical commodity producers only trade in order to hedge their actual physical production. Physical commodity consumers only trade in order to hedge their actual physical consumption. For this reason, their trades are always based on the actual supply and demand fundamentals that directly affect them in the underlying physical markets. Their trading decisions strengthen the price discovery function of the commodities futures markets.

In contrast, Index Speculators invest in a broad basket of commodities and therefore do not express a view on any single commodity. Their reasons for entering into their positions vary widely. Perhaps their investment committee recently voted to allocate millions of dollars to commodities. Or if they manage a commodity index mutual fund or ETF they might have received cash inflows from investors. Perhaps they are seeking to hedge against inflation or to make a bet against the U.S. dollar.[30] What is clear is that the vast majority of Index Speculators do not trade based on the underlying supply and demand fundamentals of the individual physical commodities. Therefore, their trading decisions damage the price discovery function of the commodities futures markets.

If a pension fund decides to allocate $100 million to a commodities futures strategy that replicates the S&P GSCI, the $40 million that consequently flows into WTI Crude Oil has nothing to do with the actual supply or demand for crude oil in the real world. Every single WTI futures contract that is traded for any reason other than the supply and demand of physical crude oil is a contract that weakens the price discovery function of the markets.

In crude oil, Index Speculator demand for paper barrels[31] has little or nothing to do with the demand for physical barrels. Yet under the current pricing system, the paper barrel price sets the real world price for physical barrels.

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[30] Some Wall Street commentators would argue that the level of the U.S. Dollar vis a vis other currencies is a fundamental factor in supply and demand. However, any effect the dollar has on supply and demand will show up in actual supply and demand figures and will be reflected in the hedging activities of physical commodity producers and consumers. Investors' myopic preoccupation with commodity prices relative to currency levels stems from their macroeconomic views rather than from any firsthand experience observing actual changes in real world supply and demand due to these factors.

[31] It is critical to note that Index Speculators never actually take possession of physical commodities, and they do not have to in order to drive up prices. They impact the price at the time that they buy their initial futures contracts. Then when their contracts approach the delivery month, they simply exchange their existing contracts for other contracts with expiration dates that are further in the future. Because futures are a zero sum game, there is someone on the other side of the Index Speculators position that generally is just as motivated to close out their position. Since well over 90% of all positions get closed out, the futures exchanges are set up to facilitate what is called "rolling," which involves a specific kind of trade called a "spread trade." As part of their roll trade, Index Speculators close out one futures contract which simply "extinguishes," and then open another new contract with a later delivery month. Because they always defer delivery, Index Speculators never take possession of physical inventories.

Contrary to what some on Wall Street would have you believe, it is physical commodity producers and consumers who make commodities futures markets "efficient."[32] The commodities futures demand of Index Speculators for "investment" reasons has little or nothing to do with the supply and demand of the actual commodities and grossly distorts the price discovery function. Institutional Investor participation actually makes the commodities futures markets less "efficient" from a pricing standpoint.

By virtue of their investment strategy, Index Speculators collectively do great damage to the price discovery function of the commodities futures markets.

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[32] The Efficient Markets Hypothesis (EMH) is a capital markets theory that underlies the key rationale for passive indexing. It says that all publicly available information concerning a company's future cash flows is already reflected in a company's stock price so you cannot consistently make money by analyzing publicly available information. It incorporates the Capital Asset Pricing Model (CAPM) which says that all securities can be valued as the net present value of future cash flows. A big part of CAPM is determining the appropriate discount rate utilizing the Beta of the security with the market. EMH and CAPM both tie into Modern Portfolio Theory that talks about the ideal composition of portfolios. Given that commodities have no future cash flows and a beta of 1 with themselves (oil is part of the oil market) it looks rather foolish to try to apply capital markets concepts to the commodities futures markets.

INDEX SPECULATORS' PRESENCE BREEDS EXCESSIVE SPECULATION AND RADICALLY RESHAPES MARKET DYNAMICS

Traditional Speculators[33], unlike Index Speculators, are not committed to any particular trading strategy. Their motivation is simply to profit from the direction of prices, whether that is up or down.

Table Two shows that in 1998, average long positions in the commodities futures markets were comprised of about 79% bona fide physical hedgers, 14% Traditional Speculators and 7% Index Speculators. Because speculators at the time were outnumbered 4 to 1 by physical hedgers, the speculators knew that futures prices would move based on what physical hedgers did. Because physical hedgers based their trading decisions strictly on supply and demand fundamentals, Traditional Speculators did the same. For this reason, commodities futures markets effectively reflected the supply and demand realities in the underlying physical commodity market and were very efficient at price discovery.[34]

TABLE TWO
Commodities Futures Markets
Percentage Of Open Interest[24]

1998	**LONG / DEMAND SIDE**		
	Physical Hedger	**Traditional Speculator**	**Index Speculator**
COCOA	89%	9%	2%
COFFEE	81%	18%	2%
CORN	87%	9%	4%
COTTON	84%	14%	2%
SOYBEAN OIL	73%	27%	0%
SOYBEANS	87%	11%	2%
SUGAR	87%	9%	3%
WHEAT	68%	21%	11%
WHEAT KC	86%	5%	8%
FEED CATTLE	52%	37%	10%
LEAN HOGS	57%	28%	16%
LIVE CATTLE	68%	24%	9%
WTI CRUDE OIL	84%	4%	12%
HEATING OIL	88%	2%	10%
GASOLINE	80%	4%	16%
NATURAL GAS	90%	3%	7%
AVERAGE	**79%**	**14%**	**7%**

Source: CFTC Commitments of Traders reports, and estimates derived from CFTC CIT Supplement.

TABLE THREE
Commodities Futures Markets
Percentage Of Open Interest[24]

2008	**LONG / DEMAND SIDE**		
	Physical Hedger	**Traditional Speculator**	**Index Speculator**
COCOA	33%	48%	19%
COFFEE	26%	35%	39%
CORN	41%	24%	35%
COTTON	32%	27%	41%
SOYBEAN OIL	46%	22%	32%
SOYBEANS	30%	28%	42%
SUGAR	38%	19%	43%
WHEAT	17%	20%	64%
WHEAT KC	37%	32%	31%
FEED CATTLE	17%	53%	30%
LEAN HOGS	18%	20%	63%
LIVE CATTLE	13%	24%	63%
WTI CRUDE OIL	59%	10%	31%
HEATING OIL	37%	16%	47%
GASOLINE	41%	20%	39%
NATURAL GAS	62%	10%	28%
AVERAGE	**34%**	**26%**	**40%**

Source: CFTC Commitments of Traders reports, and estimates derived from CFTC CIT Supplement

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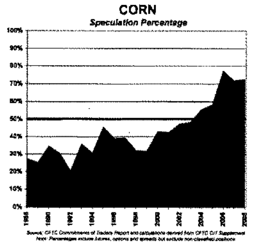
[33] A Traditional Speculator follows an active trading strategy of buying and selling. They have always been present in the commodities futures markets and do not have the detrimental characteristics of Index Speculators that I outlined in my May 20th Testimony http://hsgac.senate.gov/public/_files/052008Masters.pdf

[34] At this time, liquidity in the futures markets was more than sufficient;market participants were not complaining about a lack of liquidity. The people who most want to increase speculative volume in the name of increased liquidity are the same people who get paid on a per contract basis, namely the exchanges.

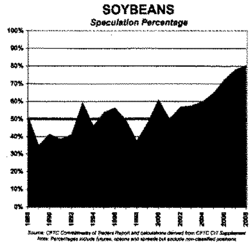
Ten years later, the markets look dramatically different. Today, on the long side of the market, the dominant position of bona fide physical hedgers has been usurped by Index Speculators. Table Three shows that Index Speculators now average 40% of the long open interest, followed by bona fide physical hedgers at 34% and Traditional Speculators at 26%. This means that speculators today outnumber bona fide physical hedgers by a 2 to 1 ratio!

Index Speculators have been consistently buying billions of dollars worth of futures contracts at an increasing rate over the last 5 years. This accelerating buying pressure has contributed to an upward price trend for commodities futures. The strong price performance of commodities has, in turn, attracted an increasing number of additional speculators, including active participants like Hedge Funds. The influx of these additional speculators into the commodities futures markets further amplifies price increases. The resulting speculative feedback loop contributes to increased volatility and accelerating price moves.

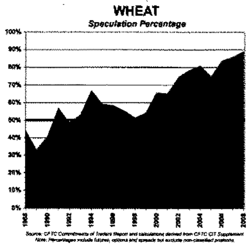
The charts below show this phenomenal increase in speculation in recent years as more and more speculators have entered the commodities futures markets.


CORN
Speculation Percentage

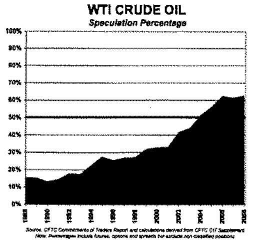
Source: CFTC Commitments of Traders Report and calculations derived from CFTC CIT Supplement
Note: Percentages include futures, options and spreads but exclude non-classified positions


SOYBEANS
Speculation Percentage

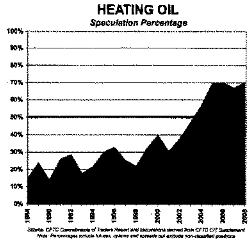
Source: CFTC Commitments of Traders Report and calculations derived from CFTC CIT Supplement
Note: Percentages include futures, options and spreads but exclude non-classified positions


WHEAT
Speculation Percentage

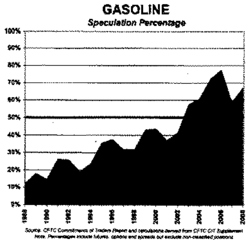
Source: CFTC Commitments of Traders Report and calculations derived from CFTC CIT Supplement
Note: Percentages include futures, options and spreads but exclude non-classified positions


WTI CRUDE OIL
Speculation Percentage

Source: CFTC Commitments of Traders Report and calculations derived from CFTC CIT Supplement
Note: Percentages include futures, options and spreads but exclude non-classified positions


HEATING OIL
Speculation Percentage

Source: CFTC Commitments of Traders Report and calculations derived from CFTC CIT Supplement
Note: Percentages include futures, options and spreads but exclude non-classified positions


GASOLINE
Speculation Percentage

Source: CFTC Commitments of Traders Report and calculations derived from CFTC CIT Supplement
Note: Percentages include futures, options and spreads but exclude non-classified positions

Traditional Speculators that were active in the markets prior to the rise of the Index Speculators have had to adapt their trading strategies to this new dynamic. Those Traditional Speculators that continued to trade purely on supply and demand fundamentals have not survived. Those Traditional Speculators that did adapt and thrive under this new dynamic have adopted trading strategies that take into account the behavior of these new entrants into the commodities futures markets.

Because the commodities futures markets are now dominated by speculators, of which the Index Speculator is the most influential type, prices in these markets move for reasons that increasingly have little to do with specific commodity supply and demand fundamentals. Today the level of the U.S. dollar, the allocation decisions of Pension Funds or the amount of investor inflows into commodity index ETFs, ETNs and mutual funds can have a much bigger impact on commodity futures prices than the fundamental conditions in the underlying physical markets. All of the discussion today about WTI crude oil being a hedge against a weakening U.S. dollar is prima facie evidence that capital markets investors now dominate the WTI crude oil markets. Bona fide physical hedgers as a group have increasingly lost their ability to influence prices through their hedging decisions.

Because of this disassociation between futures prices and the supply and demand realities in the physical markets, the futures markets are no longer able to serve the only constituency they were ever intended to serve: bona fide physical hedgers. Many bona fide physical hedgers, now greatly outnumbered and having to transact in a market that is mainly driven by the activities of large institutional speculators, are questioning the value of the futures markets for hedging purposes. If this trend continues, we can expect to see many physical commodity producers and consumers abandon the futures markets entirely as a vehicle for hedging purposes and price discovery. At that point, the futures markets' destruction from excessive speculation will be complete.

RESTORING THE PRICE DISCOVERY FUNCTION OF THE COMMODITIES FUTURES MARKETS

The time for studies is well past. Studies should be attempted prior to the adoption of new financial techniques, like the FDA does with new medicines, not after approval has been granted. "First do no harm…", the beginning of the Hippocratic Oath, is a concept that financial market regulators should take to heart.

The commodities futures markets today are clearly experiencing the detrimental effects of excessive speculation. Now, let me outline for you the steps needed to protect and strengthen the critical price discovery function of our commodities futures markets.

STEP ONE: ESTABLISH LIMITS THAT APPLY TO EVERY MARKET PARTICIPANT

As a first step, I recommend that Congress convene a panel composed exclusively of physical commodity producers and consumers for every commodity. This panel will set reasonable speculative position limits in the spot month as well as in all other individual months, and as an aggregate across all months. For commodities where real limits have been replaced by "accountability" limits, real limits must be re-established. [35]

The commodities futures markets exist solely for the benefit of bona fide physical hedgers, so they are best qualified to set the limits. These physical market participants understand the benefits of liquidity and will do nothing to jeopardize their ability to hedge. The key here is that reasonable speculative limits allow the commodities futures markets to function properly.

As part of this first step, speculative position limits must apply to every market participant (exempting bona fide physical hedgers) whether they access the futures markets directly or trade in the over-the-counter markets through swaps and other derivatives. This means effectively closing the swaps loophole and ensuring that position limits "look through" the swap transaction to the ultimate counterparty. It is essential that swaps dealers report all their positions to the CFTC so that positions can be aggregated at the control entity level for purposes of applying position limits.

One potential avenue for ensuring that speculative limits apply in the over the counter markets would be to require that all OTC transactions clear through the appropriate futures exchange. This would have the added benefit of strengthening the current system and making it more transparent.

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[35] In 1998, the CFTC codified an exemption for commodities that trade in "high volume and liquid markets" that allowed exchanges to replace speculative position limits with "position accountability limits" which do not actually limit the size of positions. Speculative position limits were still required in the spot month. So effectively this means there are no hard and fast limits for NYMEX WTI crude oil futures except in the spot month. http://www.cftc.gov/foia/fedreg98/foi980717a.htm

Additionally, it is imperative that measures be taken to ensure that speculative position limits apply to the proprietary trading desks of Wall Street Banks. Also, if a financial institution owns a physical commodity business, then they can only take exempt positions commensurate with the size of their actual physical business. Beyond that, they must be subject to the speculative position limits.

STEP TWO: PLACE AN OVERALL LIMIT ON EXCESSIVE SPECULATION FOR EACH COMMODITY

As a second step, Congress should instruct the panel of physical commodity producers and consumers to determine, based on a percentage of open interest, what constitutes "excessive speculation." As an example, physical crude oil producers and consumers may decide that the crude oil futures markets should never be more than 35% speculative (not including spreads) on a percentage of open interest basis. These are their markets, so they should be empowered to define numerically what constitutes excessive speculation.

Next, the CFTC should be instructed to establish "circuit breakers" (a concept familiar to equity market participants) that adjust individual speculative position limits downward in order to prevent any commodity futures markets from reaching the overall limit established by the panel. These adjustments to individual limits should happen in a gradual fashion and be based on data that is averaged over time in order to minimize the impact on the markets. A speculator whose existing position exceeds the newly established limit by virtue of the downward adjustment in limits would not be required to sell; they would simply be unable to add to their position.

Building on our earlier crude oil example, the CFTC could publish a sliding scale from 25% to 35% of speculative open interest that pares back the individual position limits from 100% to 20% of their normal size. So if the established aggregate speculative position limit was normally 20,000 contracts at an overall speculative percentage of 25% or less, then if overall speculation reaches 30% perhaps the individual position limit would adjust downward to 12,000 contracts.[36]

STEP THREE: PROHIBIT COMMODITY INDEX REPLICATION STRATEGIES

The third step is to eliminate the practice of investing through passive commodity index replication. Index Speculators have no sensitivity to supply and demand in the individual commodities because of the nature of passive indexing. The practice should be prohibited because of the damage that it does to the price discovery function. Congress should use any and all available means to do so. One potential avenue might be ERISA.[37]

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[36] If position limits range between 20,000 contracts (100%) and 4,000 contracts (20%) based on an overall speculative percentage of 25% to 35% then at 30%, the midpoint of the range, speculative position limits would equal 12,000 contracts which is halfway between 20,000 and 4,000. These figures are used purely for illustrative purposes and do not reflect levels that we recommend.

Another avenue might be found in the Commodities Exchange Act which states, when discussing speculative position limits, that "such limits upon positions and trading shall apply to positions held by, and trading done by, two or more persons acting pursuant to an expressed or implied agreement or understanding, the same as if the positions were held by, or the trading were done by, a single person."[38] Since, Index Speculators are all acting in express agreement by following the exact same index trading methodology, they should all be collectively subject to the speculative position limits of a single speculator. If this provision of the CEA were enforced, then the amount of money allocated to index replication would have to drop from the current level of $260 billion to the limits of a single speculator, approximately $4 billion

STEP FOUR: INVESTIGATE PHYSICAL HOARDING OF COMMODITIES BY INVESTORS

Congress should actively investigate the practice of investors buying physical commodity inventories. It has come to my attention that some Wall Street Banks are offering commodity swaps based on actual physical commodities.[39] This is a distressing development because it means that investors are directly competing with American corporations for natural resources and thereby competing with American consumers.

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[37] Pension fund trustees under the Prudent Man Rule have a fiduciary duty to avoid purely speculative "investments" (such as futures contracts). Under the Prudent Investor Rule, no class of "investments" is excluded if it makes sense from a portfolio perspective, but speculating is still not sanctioned by the rule.

[38] U.S. Code, Title 7, Chapter 1, Section 6a, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+7USC6a

[39] "CS Commodities: Group Update And Key Commodity Themes For 2008," Credit Suisse International, Alex Toone (Head of Sales) see also "Trade Idea: Fixed Rate Swap On Iron Ore," Credit Suisse International, May 23, 2008

DO NOT BE SWAYED BY EMPTY THREATS OF OFFSHORE MIGRATION

Before I conclude, let me say that many of the people who are profiting from the practices outlined in my testimony will try to scare you into believing that futures trading in U.S. commodities will simply move offshore. This is an empty threat.

First of all, any futures contract that calls for physical delivery inside the United States is automatically subject to CFTC regulation.[40] Any futures contract that cash settles against a U.S. contract with physical delivery provisions is also automatically subject to CFTC regulation unless specifically exempted.[41] If not exempted, then no person inside the United States may lawfully trade that contract.[42] So for instance, 60% of the volume of the cash-settled WTI crude oil contract on the Intercontinental Exchange (ICE) is traded by U.S. entities.[43] If the CFTC had not exempted the ICE from regulation then those U.S. entities would not be able to trade that contract and it would have been very difficult for the contract to get off the ground.

In order for any futures contract to be successful it must reach a "critical mass" of volume.[44] Market participants always prefer the contract that has the most liquidity. The United States is the largest consumer of energy in the world and the largest producer of food in the world. Every U.S.-based physical commodity producer and consumer will favor a futures contract with physical delivery provisions inside the United States. This will be the contract that they choose as their benchmark for spot market transactions, which will only encourage non-U.S. physical market participants to choose this contract as well. This ensures the critical mass of liquidity necessary for the futures contract to flourish.

The implementation of the solutions outlined in this testimony will greatly increase the confidence of market participants around the world that our futures contracts' prices are an accurate reflection of true supply and demand fundamentals. This will lead to greater participation and therefore further volume.

Re-establishing speculative position limits will significantly reduce the speculative volume on commodities futures exchanges. But, the majority of speculators likely will remain well within the speculative position limits and will not be affected. Therefore they will have no incentive to shift their trading to non-regulated exchanges.

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[40] Section 4.05[2] "Derivatives Regulation," Philip McBride Johnson and Thomas Lee Hazen, Aspen Press, 2004, pages 977-980

[41] Section 4.05[6] "Derivatives Regulation," Philip McBride Johnson and Thomas Lee Hazen, Aspen Press, 2004, pages 983-986. See also Testimony of Michael Greenberger - June 3, 2008: http://commerce.senate.gov/public/_files/IMGJune3Testimony0.pdf

[42] ibid

[43] Conversations with House Energy Committee Staff

[44] "Financial Futures and Options," Todd E. Petzel, Quorom Books, New York, 1989, page 4.

Proper enforcement of speculative position limits and the elimination of any hedge exemptions for arbitrage transactions between U.S. regulated and non-U.S. regulated exchanges will mean that prices on offshore exchanges are de-linked from prices on U.S. exchanges. If an offshore exchange (1) cannot offer a physical delivery provision within the U.S., (2) cannot attract physical commodity producers and consumers and (3) its prices cannot be arbitraged, then the prices of these offshore futures contracts will bear no relationship to the true prices found on U.S. regulated exchanges.

FINAL THOUGHTS

Institutional Investors from the capital markets have hijacked the commodities futures markets. "Passive indexing," "long only," "buy and hold," and "long term," are all capital market investment concepts that are completely at odds with the commodities futures market. These investors have been beguiled into believing that commodities futures are an asset class just like stocks or bonds. Commodities futures markets are not capital markets.

Wall Street is very good at inventing novel investment strategies because of the lucrative rewards which can follow. Unfortunately, Wall Street is not good at foreseeing the long-term consequences of the instruments that they create. We have to look no further than the recent subprime debacle, which has now grown into a worldwide financial crisis, to see where unbridled financial innovation can lead.

Can we trust that large institutions investing in an "asset class" for the first time fully understand all of the potential ramifications of their actions? What is the cost to society when an investment decision, embraced en masse by Institutional Investors, drives futures prices and spot prices higher and ultimately cripples the price discovery function of the commodities futures markets?

This concludes my testimony.

Mr. STUPAK. Thank you, Mr. Masters. Dr. Krapels, if you will, for an opening statement please. I should note for the record, Congressman Gene Green from Texas has joined us.

STATEMENT OF EDWARD N. KRAPELS, PH.D., DIRECTOR, ENERGY SECURITY ANALYSIS, INC.

Mr. KRAPELS. Good morning, Mr. Chairman and members of the Committee. Thank you for your invitation to participate in this panel. I'll try to avoid duplicating what my predecessors have said. And I don't have pictures that are any better than theirs. So let me try to make four or five of what I think are commonsense statements.

First of all, let me agree with Congressman Barton that it isn't just speculation that's driving up the price of oil. There is a very comprehensive set of physical market fundamentals that have led to tight markets. Trying to figure out precisely how much of today's price is physical versus financial is a very difficult exercise and one that's, at the end of the day, not terribly productive.

Having said that, though, I agree with my fellow panel members. And I would say that there are four things that we should look at when we think about the effect of the financial markets on the price of oil. First of all, there are always bubbles in financial markets, right? Arguing that this is not a bubble in the oil market or that oil markets are somehow exempt from having bubbles is not productive. Globally, there is so much money in today's investment world that where the money flows affects the value of the assets that the money flows to. And money, clearly, has flowed into commodities and into energy. That effect has had an effect on energy prices.

There's a wonderful book that came out a year or so ago called A Demon Of Our Own Design, by a name Richard Bookstaber from Morgan Stanley. And he wrote something that Michael has just said. I quote him: "more often than not, crises aren't the result of sudden economic downturns or natural disasters." Virtually all mishaps over the past decades had their roots in the complex structure of the financial markets themselves. We do create instruments that are so sophisticated and so difficult to understand in their interaction with one another, and that has happened in the oil business.

My second point is that in the commodities sectors, as Roger and Michael have said, index and sovereign fund managers have increased their exposure to financial energy contracts. There is no question about that. The data speak for themselves.

The third point is that those who say this has no effect on prices often argue—and I'm sure you have heard this phrase—well, there's a short for every long. Well that's true. But at what price does a short have to be short in order to meet the demand? And it is like any other commodity. If we lived in a small town and we had all owned a house and suddenly a person that has much more money than the rest of us moved in and bid up the price of our houses, the increase in the size of the funds that these people have is so enormous that there can be no doubt that this increase in the demand for paper barrels has bid up the price for paper barrels.

Finally, the potential market power of large entities—and we're talking now about market power in the old-fashioned FERC sense of the word—is enhanced by the generous leverage that's allowed for commodity trading.

Now, a couple of points about how those of us in the analysis business try to keep up with this. For years, we have had the Commodity Futures Trading Commissions's Commitment of Traders' reports. Those have been very useful. But the data in that report are so imperfect that until very, very recently, we didn't know how much of the effect of speculation was actually shown as commercial rather than noncommercial. And these changes in the transparency of the data have been very, very important to help us understand what's really going on in the oil market.

Finally, I agree with most of the recommendations of my fellow panel members. I think that it is time for Congress to require much greater disclosure from all exchanges that deal with U.S.-traded commodities. I think it is time to require all exchanges in OTC markets to impose and enforce limit positions. And I think it is time to reduce the leverage that are allowed in commodity trading, and particularly oil.

Let me make a final statement. We like to blame other people for our problems. We blame the Chinese. We blame the Saudis. We blame OPEC. But I remember earlier this morning the statement from that great American philosopher Pogo, who said many years ago, "we have met the enemy, and he is us."

Mr. STUPAK. Thank you. Thank you all for your testimony.

[The prepared statement of Mr. Krapels follows:]

Financial Energy Markets and the Bubble in Energy Prices:

Does the Increase in Energy Trading By Index And Hedge Funds Affect Energy Prices?

Executive Summary

Testimony Before the Subcommittee on Oversight and Investigations
Of the
Committee on Energy and Commerce
U.S. House of Representatives

June 23, 2008

By

Edward N. Krapels
Special Advisor
Financial Energy Markets
Energy Security Analysis, Inc.
Wakefield, Massachusetts

Executive Summary

1. Today's crude oil prices are the result of a perfect storm: demand pressures on supply in both physical and financial markets, very inelastic supply and demand in the physical markets, and rapid increases in demand (relative to supply) in the financial markets.

2. Trying to parse how much is physical versus financial (or, how high oil prices would be without the pressure from financial markets) is not a productive exercise – causation is practically impossible to measure with the information at hand.

3. My narrative on the effects on financial markets on oil prices is as follows:

    a. There are always bubbles in financial markets. Globally, the size of investable funds is so great, and the ability of managers to alter those flows so substantial, that changes in investment preferences have substantial effects on the market prices of the affected assets. This affects all assets, from equities to bonds to real estate to commodities.

    b. In the commodities sector, in recent years it appears that pension, index and perhaps sovereign fund managers have increased their exposure to financial energy contracts – especially crude oil. That increase in exposure is intended to increase the diversity of the portfolios of these funds. The size of the inflow of money from this sector, however, is extremely large in proportion to the historic size of the energy commodity markets.

    c. Those who argue this inflow of buying interest does not affect prices (the "there's a short for every long" argument) have lost sight of the fact that a large and sudden increase in demand for long positions in a financial contract may only be capable of being satisfied by increases in the price of the contract. This is as true in crude oil as it is in any other asset.

    d. The potential market power of large entities is enhanced by the generous leverage allowed for commodity trading. As of today, the typical margin requirement for a Clearing Member for a 1000 barrel contract of oil (whose notional value is approximately $130,000) is $8500.

4. Our ability to analyze these dynamics is extremely limited by several characteristics of the energy markets, regulations of those markets, and government policies:

    a. Crude oil is traded on one US-regulated exchange (NYMEX), on one UK-regulated exchange (IPE), and on over-the-counter markets, of which the Intercontinental Exchange (ICE) is the most important.

    b. Collectively, it is difficult for market observers to evaluate the potential for the exercise of market power (whether willful or accidental). The data made available by the US CFTC (the Commitment of Traders report) is extremely valuable but no such data are available for IPE or ICE trades.

5. Congress could materially reduce the ability of financial markets to influence oil prices by (a) requiring much greater disclosure from IPE and ICE, (b) requiring all exchanges and OTC markets to impose and enforce position limits, and (c) reducing the leverage allowed for energy contracts.

Financial Energy Markets and the Bubble in Energy Prices:

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BACKGROUND: THE “FINANCIALIZATION” OF ENERGY MARKETS

Do financial energy markets affect the level and the volatility of oil and gas prices? We use the term “financial energy markets” here to mean the collective of trading arenas in which forward energy prices evolve from trades on (1) formal traditional exchanges (notably the New York Mercantile Exchange), (2) new forms of exchanges that combine traditional and over-the-counter transactions (notably, the Intercontinental Exchange), and (3) bilateral energy contracts whose prices are indexed to those of the exchanges.

Discussions within the oil and finance community reflect various perspectives on this issue. The discussions raise a very important question: did the increase in oil prices to almost $140/barrel and natural gas prices above $10 per MMBTU in 2008 reflect classic commodity “bubbles” in which financial markets played a distinct, *sui generis* role[1]; or a “new regime” of permanently higher prices brought about by sharp increases in demand and enduring changes in supply, which pushed both crude oil and natural gas into suddenly much higher marginal production costs? As always, the answers are not mutually exclusive. We may be living in a period when there has been a “perfect storm” of conditions conducive to higher energy prices.

This is obviously an enormously complication question. The number of dollars involved in energy futures and over the counter markets (collectively, the energy derivatives markets) is measured in the hundreds of billions. The physical oil market is global in scale, and information about global oil stocks and flows is notoriously incomplete. The flow of investor funds into commodities; into the fuels segment of commodities; into individual fuels; and from the long to the short side of particular markets is also immense and has been growing rapidly in the last five years.

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[1] We use *sui generis* here in its legal context: as a unique, distinct, or one-of-a-kind effect.

The questions the House Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce are exploring this week is whether the increase in the volume and open interest in oil and gas derivatives markets has a significant impact on world crude oil and petroleum product prices, and on U.S. natural gas prices.[2] I believe this is likely to be one of those questions that – to use Gregory Treverton's useful distinction[3] -- is a mystery, rather than merely a puzzle. In their formal capacities, economists are trained to treat problems as puzzles, amenable to rational analysis. That requires enough information to move the problem from the mists of mystery to the brighter lights of puzzles. There are reasons to believe that condition does not exist, yet, in this case.[4]

How do financial energy market activities influence energy prices? In articles I have published on this issue[5], I have compared the "flow of funds" of the magnitude we are seeing today to a new wave of buyers and sellers interested in oil and gas. Could that flow have created a "bubble" in oil and gas prices in 2005, 2006 and 2007? Examples of such bubbles abound. From Dutch tulip markets in the 1600s to Internet equities in the 2000s and the subprime mortgage crisis today, asset classes routinely go through booms and busts created – not by any change in the costs of production or technological change in the value added by consumption – but purely by virtue of a change in investors' desire to own the asset.

There were forward and derivative instruments in oil markets as far back as the 1860s, but they were not as ubiquitous and as easy to use as those available today. Before the advent of modern financial markets, the desire to own oil could manifest itself in only limited ways. One could hoard physical barrels of oil, put them in storage, and sell them at a later date (at a profit or a loss). Or, one could buy the equity or debt instruments of oil producing companies.

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[2] ESAI first called attention to the apparently growing influence of financial markets in a memo we sent to our clients in 1994, which was subsequently published as an article in Energy Risk (November 1994)2. Subsequent elaborations on our argument have appeared in memos to our clients as well as in later issues of *Energy Risk* and in *Managed Derivatives* (August 1996).

[3] Gregory Treverton, "Intelligence – A Funhouse of Reflections," Commentary on the website of the Rand Corporation; http://www.rand.org/commentary/0216SFC.html (January 17, 2007.

4 This prepared statement is an update of a similar statement I submitted to a Joint Hearing of the U.S. Senate Permanent Subcommittee on Investigations of the Committee on Homeland Security and The Governmental Affairs and the Subcommittee on Energy of the Committee on Energy and Natural Resources on December 11, 2007.

[5] For example, Edward N. Krapels, "Hunters or Hunted?" *Managed Derivatives*, May 1996, pp. 14-15.

Beginning in the 1980s, the emergence of a viable and liquid futures market for oil made it much easier for investors and traders to deal in the commodity: they could buy or sell contracts, settled by an Exchange. U.S. natural gas followed suit in the early 1990s. Like any other futures market, the oil and gas futures markets allow one class of participants to hedge, and another class of participants to speculate. Speculators play an important role: they allow hedgers to put aside the risk of commodity price fluctuations to others better able or more willing to live with them. Oil and gas producers and consumers are hedgers, small traders and larger financial institutions, like hedge and private equity funds, some investment banks, and specialized energy trading outfits, are speculators.

Even though many crude oil and natural gas producers, oil refiners, and petroleum product and natural gas consumers do not hedge, the fact remains that New York Mercantile Exchange (NYMEX)-traded West Texas Intermediate (WTI) crude oil and Intercontinental Exchange (ICE) –traded Brent crude oil, American and European heating oil and gasoline, and U.S. natural gas contracts have become benchmarks of both physical commodities and financial assets whose price fluctuations affect the economics of the entire energy industry as well as those buying services from that industry. Thus, even purely commercial participants in oil and gas markets are just as affected by the force of financial energy markets as are the speculators and hedgers that use them every day.

Beginning in the 1990s, some participants in oil and gas markets began to suspect that the trading behavior of institutional speculators was influencing prices. These speculative organizations had been minor participants in the financial oil markets since the crude oil contract was launched in 1984. By the mid-1990s, however, the number of financial investors trading crude oil contracts began to increase rapidly. The increase was not confined to oil: to the contrary, one can only understand the phenomenon, and how to deal with it, if one understands the larger investment picture in global financial markets.

With the wide array of contracts and assorted rules on leveraging trades, international financial markets have become extremely complicated. In every economy, wealth is held in the form of land, precious metals, goods, and financial instruments like stocks, bonds, currency holdings, and futures contracts. The stock of wealth, on a global scale, has to be tallied in the hundreds of trillions of dollars. The largest shares are in the United States, Japan, and Western Europe.[6]

If the stock of global wealth can be measured in the hundreds of trillions of dollars, the flow of funds – which no single institution measures systematically – amounts to several trillions of dollars over the course of a year. Thus, a Japanese investor may sell his real estate in Tokyo in order to buy stocks in Malaysia, or U.S. Treasury Bills, or crude oil futures contracts, or a trunkful of gold or silver. He may also deposit his funds in a bank, which then makes loans, engages in swaps, and sells futures and options in the over the counter markets.

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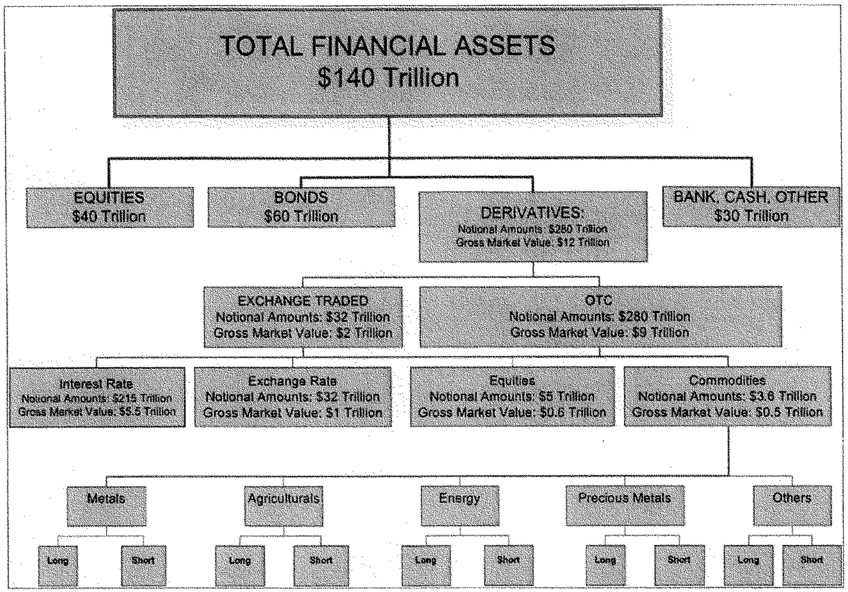
[6] For a valuable summary, see *International Capital Markets: Developments, Prospects, and Key Policy Issues*, International Monetary Fund, (a Staff Team led by Charles Adams, Donald J. Mathieson, Garry Schinasi, and Bankim Chadha). Available on the World Wide Web at http://www.imf.org/external/pubs/ft/icm/icm98/index.htm


TOTAL FINANCIAL ASSETS
$140 Trillion
EQUITIES
$40 Trillion
BONDS
$60 Trillion
DERIVATIVES:
Notional Amounts: $280 Trillion
Gross Market Value: $12 Trillion
BANK, CASH, OTHER
$30 Trillion
EXCHANGE TRADED
Notional Amounts: $32 Trillion
Gross Market Value: $2 Trillion
OTC
Notional Amounts: $280 Trillion
Gross Market Value: $9 Trillion
Interest Rate
Notional Amounts: $215 Trillion
Gross Market Value: $5.5 Trillion
Exchange Rate
Notional Amounts: $32 Trillion
Gross Market Value: $1 Trillion
Equities
Notional Amounts: $5 Trillion
Gross Market Value: $0.6 Trillion
Commodities
Notional Amounts: $3.6 Trillion
Gross Market Value: $0.5 Trillion
Metals
Agriculturals
Energy
Precious Metals
Others
Long
Short
Long
Short
Long
Short
Long
Short
Long
Short

This intricate web of investments, loans, and derivatives has grown exponentially over the last ten years. Parts of this web are always under some pressure. There is almost always a small meltdown or bubble somewhere. In 1998 and 1999, the meltdowns were very large indeed. Asian equity, real estate, and currency markets collapsed. In 2001, the meltdown occurred in U.S. and global equity markets in the spring of 2000.

Meltdowns can happen anywhere. In late September 1998, reports began to circulate of a successful effort by the New York Federal Reserve Bank to orchestrate a $3.5 billion bailout of a hedge fund (Long Term Capital). According to new reports, "Wall Street's biggest power brokers agreed to prop up one of their most aggressive offspring, Long-Term Capital Management, L.P., a highflying hedge fund that was on the verge of collapse."[7] According to the

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[7] "A Hedge Fund Falters, and Big Banks Agree to Ante Up $3.5 billion," *Wall Street Journal*, September 24, 1998, p. A-1.

Wall Street Journal, one of the "hotly debated topics" in the meeting that reached the accord to bail out the Fund was that its failure "would put the entire financial system at risk" because the Long Term Capital had leveraged its several billion dollars of investment capital into a market position that at times exceeded $100 billion.

FINANCIAL MARKETS AND ENERGY FUNDAMENTALS

Some authoritative observers – like former Federal Reserve Chairman Alan Greenpsan and eminent oil economic Robert Mabro -- believe the financial markets have a *sui generis* impact on oil prices. If so, there must be "fundamentals of paper markets" that one must assess along with the fundamentals of the physical markets in order to obtain a complete view of oil pricing dynamics. Others are more skeptical, believing that futures and forward prices reflect entirely information about the fundamentals of the physical market. Some of those who believe the financial markets have a *sui generis* impact on prices are advocating stricter regulation of energy trading activities. Given the ease of international capital movements, however, it is unclear whether regulation in and by the United States would have much effect; squeezing one part of the energy trading balloon may only cause the bubble to appear elsewhere.

Discussions within the oil and finance community reflect various perspectives on the issue: do oil prices above $50/barrel and natural gas prices above $5 per MMBTU reflect classic commodity "bubbles" in which financial markets played a distinct, *sui generis* role, or a "new regime" of permanently higher prices brought about by sharp increases in demand, which pushed both crude oil and natural gas into suddenly much higher marginal production costs. Recognizing that both financial and physical dynamics are always at play, the issue nevertheless is whether the financial dynamics have a distinct and measurable role.

The bubble argument suggests that developments in financial energy markets (especially the increase in cash under management of hedge and other funds, and the decisions of index-oriented funds to take long positions in commodities, including energy) may have precipitated a classic period of "too many buyers chasing too few sellers" of financial oil instruments. Such periods of "excess demand" have occurred hundreds of times in competitive markets over the course of centuries. Once oil and gas developed futures and forward market instruments, with all of the fungibility characteristics of such instruments, they too became prey to purely financial bubbles. The potential for such bubbles increased in recent years because of the massive scale of increased involvement of financial institutions that heretofore had not been significant players in the energy space.

For example, Robert Mabro argues that

> "Econometric models show that the net position of the so-called 'non-commercial traders' is correlated with the subsequent direction of price changes. In other words, when the non-commercial entities hold a net long position (they are betting on a price rise) prices often do rise. And the opposite impact occurs when these entities hold net short position. Is it not odd that the non-commercial players (meaning very broadly the non-oil companies) should lead and the commercial entities (broadly speaking oil or energy companies, oil users and oil-related agents) should follow in what is supposed to be an oil market?"[8]

Others believe in variations of a "new regime" argument that has two dimensions. On the supply side, they would argue that there has been a permanent movement up the oil and gas production cost curve caused by a lack of investment by and in the petroleum extraction industry.

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[8] Robert Mabro, "Robert Mabro Questions the Suitability of the Current Oil Price Regime," *Oxford Energy Forum*, February 2007, page 15.

On the demand side, there has been an increase in the rate of growth in oil and gas demand (the oil side mostly from Asia; the gas side mostly from increases in the use of combined cycle gas turbines). Taken together, the new regime is characterized by increases in demand for oil and gas that exceed the increase in supply. Thus, the new regime argument indicates it was inadequate investment in production, not excess investment in financial energy markets, that was primarily behind the massive price increases of 2000 – 2006.

In the oil market, many focus on the fact that spare crude oil production capacity has diminished, and there have been additional concerns over supply adequacy caused by the increasingly prominent "peak oil" thesis.[9] Such long-term concerns can explain why market participants have bid up the price at the back of the forward curve. Sellers at the back end of the curve may believe the peak oil argument is overblown, and that in any event marginal cost does not set the crude oil price.

A third and more nuanced view – in some variations related to Peak Oil – argues that the world has exhausted most of the oil that is available at finding costs of less than $10/barrel. This leads to a traditional, increasing-marginal-cost explanation for higher oil prices. The chart above presents the relationship between production cost, oil already produced, and the marginal costs of alternatives to "cheap oil" as seen by the International Energy Agency (IEA). The IEA supply curve indicates that there are 5 *trillion* barrels of oil available at "economic prices" of less than $70/bbl (in 2004 dollars). If this is correct, and the oil extraction business still responds to economic opportunities, then the market prices of $70/barrel reached in 2006 were unsustainable, and constituted a classic commodity "bubble." The financial energy markets, by providing such

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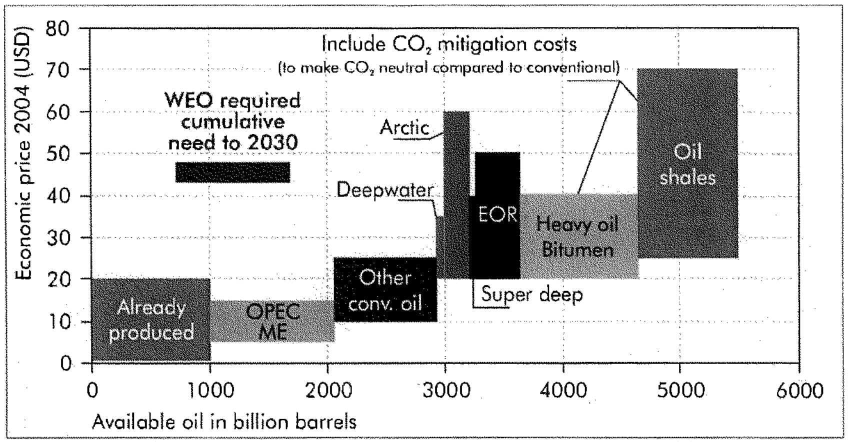
[9] Those who adhere to the Peak Oil argument have developed , *inter alia,* regular conferences and journals reviewing the topic. See the Peal Oik web site maintained by Colin Campbell at http://www.peakoil.net/.



convenient vehicles for the financial expression of views about oil scarcity, will have contributed to the bubble.

The IEA supply curve is a useful tool for pointing out that the quantity of "OPEC ME" (OPEC Middle East) available oil is curtailed by instability (as with Iraqi oil), failure to maintain fields properly (as some believe is the case with Iranian reserves), and deliberate under-production of available reserves by governments who have decided that their nations' discount rates are very, very low. The conundrum is that there is still a great deal of oil in the "OPEC ME" category, available for exploitation at less than $15/bbl, but there are political constraints on its expeditious production. Those who invest in more expensive oil are essentially taking a political gamble that this oil will continue to be held off the market, making it economical to invest in the production of more expensive conventional and unconventional oils. In essence, they are speculating on the assumption that the sub-$15 barrels are no longer on the margin.

For investors, these arguments are of more than academic interest. Any investment in high-cost conventional oil resources runs the risk that the constraints on producing more of the sub-$15 oil pool will be relieved. Such relief could come from resolution of political conflicts in the Middle East, thus releasing the pent-up Iraqi reserves, or from a decision by Saudi Arabia to double its production.

In the absence of liquid financial energy markets, market participants could express their views on these issues in only two "physical" markets: the spot market, and the markets for oil in the ground.[10] The existence of financial energy markets provides a forum for the expression of views in the arena between spot markets and oil in the ground. Financial energy markets are available for the "prompt month" (which should converge with the spot price), and then for months and years into the future.

Concerns About the Impact of Financial Markets

As prices rose from the customary trading range of $10 to $30 in the 1990s, to $30 - $100 beginning in 2002, the debate about the role of financial markets became more heated, and attracted notable participants, especially in the United States. In the summer of 2006, a number of investigative committees of the U.S. Senate conducted hearings on the issue, and one committee—the Permanent Subcommittee on Investigations – issued an influential report titled *The Role of Market Speculation In Rising Oil and Gas Prices: A Need To Put the Cop Back On the Beat.*

Former Federal Reserve Chairman Alan Greenspan explained to the Senate Foreign Affairs Committee that there had recently been "a major upsurge in over-the-counter trading of oil futures and other commodity derivatives." Greenspan observed that "increasing numbers of hedge funds and other institutional investors began bidding for oil [and] accumulated it in substantial net long positions in crude oil futures, largely in the over-the-counter market," and that these activities affected oil prices: "These net long futures contracts, in effect, constituted a bet that oil prices would rise... With the demand from the investment community, *oil prices have moved up sooner than they would have otherwise.* "[11]

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[10] While derivative markets for oil have existed in some forms since the 19th century, we will date the emergence of the modern petroleum derivatives markets with the successful launch of the forward markets in the North Sea in the late 1970s and the successful launch of the New York Mercantile Exchange crude oil contract in 1984. We treat investments in oil producing companies as a subset of the market for oil in the ground.

Mr. Greenspan also suggested that these price increases have stimulated additional oil production, a large increase in oil inventories, and a partial scale-back of consumption.[12]

The U.S. Senate sub-Committee investigating oil prices in 2006 concluded that

"[T]here is substantial evidence that the large amount of speculation in the current market has significantly increased prices. Several analysts have estimated that speculative purchases of oil futures have added as much as $20-$25 per barrel to the current price of crude oil, thereby pushing up the price of oil from $50 to approximately $70 per barrel."[13]

These opinions about the effect of speculation in financial energy markets on oil prices appears to be based on a fairly straightforward proposition: the large and sudden increase in the market position of any subset of oil market participants will tend to move prices up if the increase is in demand (expressed in financial energy markets as an increase in long positions) and down if the increase is in supply (expressed in financial markets as an increase in short positions). Even though there is "a long for every short and a short for every long," any large market participant can create sudden surges in supply or demand (or sudden shifts in the demand or supply curves of the oil market).

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[11] Greenspan, Alan. *Statement before the Senate Committee on Foreign Relations, United States Senate*, June 7, 2006.

[12] Coleman, Norm (Chairman). Levin, Carl (Ranking Minority Member). *The Role of Market Speculation In Rising Oil and Gas Prices: A Need To Put the Cop Back On the Beat*, Staff Report, Permanent Subcommittee on Investigations, U.S. Senate, June 27, 2006, page 3. Hereafter, Coleman [2006].

[13] Coleman, Norm (Chairman). Levin, Carl (Ranking Minority Member). *The Role of Market Speculation In Rising Oil and Gas Prices: A Need To Put the Cop Back On the Beat*, Staff Report, Permanent Subcommittee on Investigations, U.S. Senate, June 27, 2006, page 2.

For example, assume that on a given day an extremely large speculator decides to go short. His brokers will then attempt to purchase 5,000 short contracts. All other things being equal, the effect of such a large increase in the number of shorts demanded is to drive down the price. The order for 5,000 short contracts amounts to a search for 5,000 long contracts, and in the open outcry process on the floor of the NYMEX, the bid price will fall until the necessary number of longs are attracted to take the offsetting positions for the 5,000 shorts.

The nature of any market – financial or physical – is that such a process can feed on itself. If the intra-day price decline forces prices below a technical support level, those who trade on such signals will be attracted into the market, creating further downward price pressure. Market participants can wonder what led to the price decline if nothing of consequence was indicated in the physical supply-demand equation.

For many economists, such effects can be expected only if two conditions exist: a large market participant is exercising market power, or subsets of market participants are (deliberately or coincidentally) acting together, or "herding" and the effect of their acting together is to exercise market power.[14]

Trading Entities and Their Trading Styles

While hedge funds have attracted much of the attention of the press, they are only a subset of all of the institutions that trade oil. Even within their own cohort, hedge funds are an extremely variegated herd, each with its own directives and trading strategies. The effects of the oil trades of these participants are unlikely to flow in the same direction.

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[14] For a detailed presentation on the difference between these two market characteristics as it applies to financial oil markets, see Robert J. Weiner, *Do Birds of a Feather Flock Together: Speculator Herding in the World Oil Market*, (Washington DC: Resources for the Future Discussion Paper, June 2006).

Quite apart from hedge funds, commercial and investment banks make a variety of offerings to investors that, ultimately, result in a financial institution placing substantial hedge positions in the market. For example, some banks offer structured notes indexed on oil with fixed or guaranteed returns. The buyers of these notes are not oil market participants, and purchase them largely for portfolio diversification.

Of greatest recent interest is the role of yet a third type of trading entity in the energy sector -- index or passive investors, who are looking for portfolio insurance via commodity returns, and are prepared to pay for the portfolio benefit. These funds may buy an index, like the Goldman Sachs Commodity Index, which guarantees them the return of the index. The seller of that index, usually a bank, hedges the index exposure in the energy market by buying the futures that correspond to the index. Some participate as buyers in a Roll Index, which could entail, for example, buying the second month futures. When the prompt month expires, the Roll Index participant holds the prompt, which they sell to buy the second month futures contract again.[15] Others take the opposite view, and are roll sellers.

There is a substantial amount of anecdotal evidence that much of the increase in open interest in commodity contracts was precipitated by a decision of pension funds to increase their exposure to commodities. For example, the *Wall Street Journal* reported on September 9, 2004 that "at the start of the decade, Europe's two biggest pension funds had no commodity investments. Stichting Pensioenfonds ABP, the €157 billion ($190 billion) fund for Dutch government and educational-system employees, got into commodities in 2001 and has reached its target of having 2.5% of its assets, or close to $5 billion, in commodities. A year earlier, the €55.7 billion PGGM fund for Holland's health-and-welfare sector waded into commodities. It now has 4.3%, or roughly $3 billion, invested in them."

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[15] See, for example, Dizard, John, "Speculators Profit from Commodity Investors," which notes that speculators "in the pits, physical or electronic, bet against the certainty that commodity index investors' positions are rolled in a mechanistic manner every month, in known patterns on particular days." *Financial Times*, Jan. 22, 2007.

The interest in commodity exposure was not restricted to pension funds: "Harvard University has been investing in commodities for more than a decade, and its internal benchmark calls for allocating 13% of the university's $19.3 billion endowment to oil, gas and other commodities. That's just two percentage points less than the weighting assigned to U.S. stocks and two points more than the allocation to U.S. bonds. Unlike many pension funds that passively follow a benchmark, Harvard actively manages its commodity investments, and 10 percentage points of the 13 allocated to commodities are invested in timber."[16]

Within the financial community, however, it would be quite unusual for the trading activities of each of these entities to have effects in the same direction. To the contrary, one would expect that the effects of these traders on markets would *usually* be quite dispersed as each trader follows his own objectives. Anecdotal accounts refer to a variety of trading styles:

- *Mean reversion* traders believe that commodity prices tend to return to long-term averages, and thus their trades would tend to help market prices remain within given channels. *Chartists or technical traders* could accentuate trends when their systems indicate they should endure, and bring them to an end to when their systems indicate they should not. Notions of powerful "support" and resistance levels have long held sway over this community, and there is an array of software support available to those who trade in this manner.
- *Macro traders* believe in linkages between energy and other markets. These include incorporating views on macro-economic growth into energy trades (the

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[16] Michael R. Sesit, "Commodities Enter Investment Mainstream," *Wall Street Journal*, September 9, 2004.

"China syndrome"), or specific statistical relationships (dollar – yen – oil pricing dynamics).

- *Fundamental* commodity *traders* who believe they have superior information about energy supply and demand.
- *Passive investors* who only own energy contracts for their portfolio effects. In recent years, pension funds holding hundreds of billions of dollars began allocating a few percent to energy commodities. This so-called "index investing" is a trickle for this segment of the economy, however, is a torrent of investment for the energy sector. Banks make various offerings to their private banking investors that, ultimately, may result in a financial institution placing substantial hedge positions in the market (whether these are shown as hedges in CFTC reports is unclear). For example, some banks offer structured notes indexed on oil with fixed or guaranteed returns. The buyers of these notes are not oil market participants, and purchase them largely for portfolio diversification.
- *Roll index* investors looking for portfolio insurance via commodity returns are prepared to pay for the portfolio benefit. They may buy an index, like the Goldman Sachs Commodity Index, which guarantees them the return of the index. The seller of that index, usually a bank, hedges the index exposure in the energy market by buying the futures that correspond to the index. Some participate as buyers in the Roll Index, which could entail, for example, buying the second month futures. When the prompt month expires, the Roll Index participant holds the prompt, which they sell to buy the second month futures contract again. Others take the opposite view, and are roll sellers.

Analysis of The Effects of Financial Markets on Oil and Gas Prices

In the past decade, various studies of the behavior of financial market participants have been conducted, and they have shed a considerable amount of light on what is, and is not, happening. In this endeavor, the primary source of data on financial traders' behavior is the "Commitment of Traders" report of the U.S. Commodities Futures Trading Commission (CFTC).

The CFTC divides market participants into "commercial" and "non-commercial" classes:

> "A trading entity generally gets classified as a "commercial" by filing a statement with the Commission (on CFTC Form 40) that it is commercially "...engaged in business activities hedged by the use of the futures or option markets." In order to ensure that traders are classified with accuracy and consistency, the Commission staff may exercise judgment in re-classifying a trader if it has additional information about the trader's use of the markets.
>
> A trader may be classified as a commercial in some commodities and as a non-commercial in other commodities. A single trading entity cannot be classified as both a commercial and non-commercial in the same commodity. Nonetheless, a multi-functional organization that has more than one trading entity may have each trading entity classified separately in a commodity. For example, a financial organization trading in financial futures may have a banking entity whose positions are classified as commercial and have a separate money-management entity whose positions are classified as non-commercial.

> The long and short open interest shown as "Nonreportable Positions" are derived by subtracting total long and short "Reportable Positions" from the total open interest. Accordingly, for "Nonreportable Positions," the number of traders involved and the commercial/non-commercial classification of each trader are unknown."

Finally, as noted earlier in this report, the CFTC provides an additional level of detail on the behavior of non-commercials with its reports on spreading activities:

> "For the futures-only report, spreading measures the extent to which each non-commercial trader holds equal long and short futures positions. For the options-and-futures-combined report, spreading measures the extent to which each non-commercial trader holds equal combined-long and combined-short positions."[17]

Published COT data, while interesting and useful, however, are incomplete and sometimes unclear. The most important omission is over-the-counter market transactions. As noted earlier, over the past several years, more and more forward transactions (both energy and non-energy) have moved from organized exchanges like NYMEX to platforms for bilateral and OTC trades, particularly the Intercontinental Exchange. Thus, it is appropriate to consider the volume and open interest data of the NYMEX the tip of energy trading iceberg.

In addition, within the confines of the COT data, it is unclear how bright the line is between the "non-commercial" (a.k.a., speculators) and "commercials" (a.k.a., hedgers). Analysts disagree about the best way to use the data in the analysis of the influence of specific trading cohorts over prices. Some argue in favor of using total (commercial, non-commercial, and non-reporting) open interest, others total non-commercial open interest, and yet others total net non-commercial open interest.

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[17] See "Backgrounder" on CFTC web site http://www.cftc.gov/opa/backgrounder/opacot596.htm.

Even though the COT data are incomplete and unclear, they are all the data practitioners have. Thus, given that is information, the analytical community has naturally tried to find relationships between changes in trading positions and prices. After some ten years during which a number of studies – with varying degrees of rigor and focus – have been conducted, it is fair to say that – Robert Mabro's previous assertion notwithstanding -- there is no consensus on whether financial markets exert a *sui generis* effect on the price of oil and gas.

Generally, formal statistical results on the issue are deemed unimpressive, which is to be expected given the dispersion of trading strategies already reviewed. A 2006 study conducted by the U.S. Commodities Futures Trading Commission concludes that,

> "on average, [managed money trader] MMT participants do not change their positions as frequently as other participants, primarily those who are hedgers. We find that there is a significant correlation (negative) between MMT positions and other participant's positions (including the largest hedgers), and results suggest that it is the MMT traders who are providing liquidity to the large hedgers and not the other way around. We find that most of the MMT position changes in the very short run are triggered by hedging participants changing their positions. That is, the price changes that prompt large hedgers to alter their positions in the very

short run eventually ripple through to MMT participants who will change their positions in response."[18].

Robert Weiner, in a study published in 2006, obtained access to detailed COT data and conducted an analysis focusing on market power and herding. The study concludes that "the evidence indicates that speculators as a group did not herd during the time period for which data are available (mid-1990s). There is evidence, however, that some subgroups of speculators do tend to act in parallel ('flock'), notably commodity pool operators. .. Even among subgroups that flock, the extent of parallel trading is modest."[19]

Another study was conducted by analysts from the International Monetary Fund, which compared the behavior of oil spot prices and the non-commercial positions in three commodities: crude oil, copper, and cotton. The IMF study – acknowledging that COT data had numerous characteristics that hindered definitive analysis –concluded that "[crude oil, copper, and cotton] prices appear less volatile than speculative positions across commodities, with no discernible common trend between prices and speculation. For example, in the crude oil market there has been no persistent pickup in net long noncommercial positions in recent years when oil prices have had a strong upward trend. More strikingly, in the copper market, net positions have actually fallen steadily over the past year, during which prices have reached record highs, suggesting that contrary to common perceptions, speculation may not have played a major role in the recent price run-up."

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[18] See Michael S. Haigh, Jana Hranaiova and James A. Overdahl, Office of the Chief Economist, U.S. Commodity Futures Trading Commission, "Price Dynamics, Price Discovery and Large Futures Trader Interactions in the Energy Complex," April 28, 2005.

[19] Weiner, *Do Birds of a Feather Flock Together: Speculator Herding in the World Oil Market* (Washington, DC: Resources for the Future Discussion paper, June 2006).

The IMF study left open, however, the possibility that – for shorter periods of time – there may be a stronger link between the positions of non-commercials and prices: "while the series do not appear to be correlated over the long run, for most commodities some correlation appears to be present over subperiods, as peaks and turning points seem to occur around the same time across the two series."[20]

Some Illustrative Analyses of Financial Market Effects on Oil Prices

If it is unsurprising that simple correlation studies would fail to find a long-term, systematic relationship between oil prices and the changes in trading positions, there remains an apparently large community who appear less impressed with an absence of statistical proof and more impressed with practitioner statements – such as those by Mr. Greenspan and Mr. Mabro – that appear to take for granted that financial markets have a *sui generis* impact on oil prices.

At the most general level, regulators appear to take for granted that "the funds" can affect the markets in which they participate. For example, the U.S. Federal Reserve Board's Patrick Parkinson testified before Congress that "Although the role of hedge funds in the capital markets cannot be precisely quantified, the growing importance of that role is clear. Total assets under management are usually reported to exceed $1 trillion. Furthermore, hedge funds can leverage those assets through borrowing money and through their use of derivatives, short positions, and structured securities. Their *market impact* is further magnified by the extremely active trading of some hedge funds. The trading volumes of these funds reportedly account for significant shares of total trading volumes in some segments of fixed income, equity, and derivatives markets.[21]"

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[20] Sergei Antoshin and Hossein Samiei, ""Has Speculation Contributed to Higher Commodity Prices?" in Name of IMF Report, (Washington, DC: International Monertary Fund), pp. 15-18.

[21] Patrick Parkinson, Deputy Director, Federal Reserve Board, Division of Research and Statistics, "The Role of Hedge Funds in the Capital Markets," Testimony Before the Subcommittee on Securities and Investment, Committee on Banking, Housing, and Urban Affairs, U.S. Senate May 16, 2006. Emphasis added.

The June 2006 report from the Senate Permanent Subcommittee On Investigations titled "The Role Of Market Speculation In Rising Oil And Gas Prices: A Need To Put The Cop Back On The Beat" cited (in addition to Mr. Greenspan), Citigroup, Goldman Sachs, and eminent energy economist Philip K. Verleger, Jr. as being in the camp of those who believe there is a relationship between financial market activity (specifically, speculation, which is a narrower form of participation than we are reviewing in this paper), and oil prices.[22]

Clearly, given the different ways financial institutions participate in financial oil markets, simple regressions of the market positions of any particular cohort of market participants (including "non-commercials") with price changes are unlikely to be revealing. The trading community is much too variegated to have a simple, measurable effect. The fact is that financial markets offer a variety of participants, each with its own directives and trading strategies. Therefore, the effects of the oil trades of these participants would rarely flow in the same direction. An analysis of the long-term relationships between any particular group of traders and the price of oil or gas, therefore, is unlikely to provide much insight.[23]

More fundamentally, it would be naïve to expect any sustained causation between trading strategies and prices. Some trading strategies are based on the belief that markets eventually maintain fundamental relationships, and trades reflecting that belief can act as stabilizers to the market, and slow a market's adjustment to new developments. Chartists and trend traders, in contrast, can push the market quickly to new levels and can exaggerate price moves. Macro funds provide a linkage between commodity markets and other global investment markets. Fundamental commodity funds may actually enable futures prices to reflect the current expected future outcome, where current publicly available information is inadequate or inadequately distributed.

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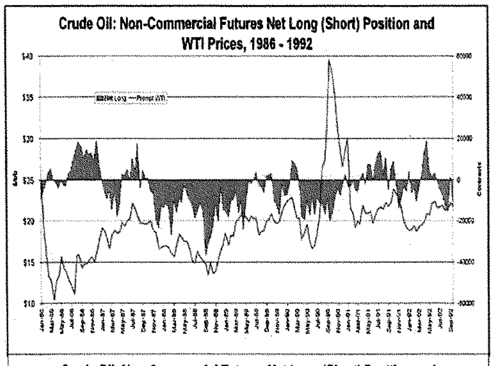
[22] Coleman [2006], p. 24-25.

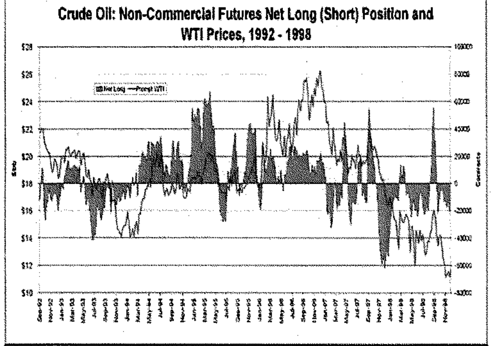
[23] Economists call the tendency of traders to engage in similar strategies "herding." Robert Weiner has shown that there is little evidence of systematic and prolonged herding in the financial oil markets.

There are, nevertheless, several areas where causation should not be dismissed, all of them consistent with normal economic analysis:

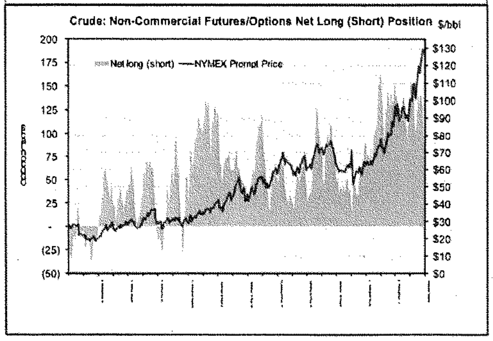
1. *Perfect storm* episodes: there are likely to be periods of time when the condition of the physical energy market and trading strategies of financial market participants are in such good alignment as to produce "herding" and "bubbles" or their opposite, crashes.
2. *Variations on the market* power *syndrome:* It is possible that the positions of some market participants – index funds as one example – are so large as to constitute witting or unwitting market power. A large-scale infusion or retreat from any of the various positions very large index funds might have price effects. The contract volumes involved in such shifts may -- in the scale of oil trading -- be quite large, but in the scale of money under management by these funds, be quite small. The index funds may be the "elephants in the bathtub" – especially in the long-dated markets.



Crude Oil: Non-Commercial Futures Net Long (Short) Position and WTI Prices, 1986 - 1992



Crude Oil: Non-Commercial Futures Net Long (Short) Position and WTI Prices, 1992 - 1998



Crude: Non-Commercial Futures/Options Net Long (Short) Position

Analysts have traced developments in total open interest in the WTI futures contract and the price of prompt WTI. At a simple level, the correlation of these two data sets has an R^2 of 0.6 over the entire 1983 to 2006 period. In keeping with a theory that the financial markets occasionally have little impact on oil prices, there are periods (e.g., from 1996 to mid-1999) when there was a very low correlation between them, and other periods (e.g., from January 2001 to October 2006) when the correlation was quite strong (an R^2 of 0.8). These results invite a theory that (1) index funds may be biased to the long side of the WTI contract, perhaps because a long position in oil is used as a hedge against inflation, and (2) they tend to follow trends. That theory holds up quite well during the bull market for oil and other commodities that was evident from 2001 to 2006.

The analysis of the net positions of non-commercials reveals periods of greater and lesser correlation, *as is to be expected* given the dispersion of trading programs. The charts nearby define a net position as long minus short open interest, and break the 1986-2006 period into three parts:

1. 1986 to 1992, when (except for the period marking the Iraqi invasion of Kuwait and before the onset of the Gulf War that expelled Iraq from Kuwait) WTI was trading in a range of $10 to $20/bbl. During this period, non-commercials were usually net short and their swings from net long to net short appeared to coincide with decreases in the price of WTI.
2. 1992 to 2001: Non-commercials' positions oscillated between net long and net short in long trading cycles that tracked a WTI trading pattern between $14 and $26/bbl. At the end of that cycle, during the period marked by the Asian financial crisis, WTI prices sank to nearly $10/bbl.
3. 2002 to 2007: a great and extended bull market, beginning from the depths of the Asian economic crisis, brought oil prices from $20 to $100. The non-commercials were usually on the long side of this trend. Open interest in the WTI contract rose rapidly during this period. Anecdotal evidence indicated new money from index and pension funds, pulled into oil markets by financial advisors urging their clients to increase their long exposure to commodities. This inflow would have helped to accelerate the oil price increase. Their high rates of return in 2004 and 2005 fed the impulse of other funds to get on the long side of oil. This trend continued into 2006 and 2007. When it appeared towards the end of the year that the long bull market was over, funds rapidly bailed out of their positions,

accentuating the downward pressure on prices which pushed prices back towards $80/bbl towards the end of the year.[24]

In these charts, the visual correlation between the net positions of the non-commercials and the price of WTI occasionally supports a conjecture that sudden changes in the preferences of speculators may be among the causes of changes in the price of oil.

A third approach to the study of the effects of financial energy markets is to evaluate the relationship between the spread positions in the NYMEX WTI contract and the price of WTI. The volume of spread trades has increased enormously, and now outweighs the number of outright trades. It is interesting to observe that there is a high positive correlation (R^2 of 0.86) between the amount of open interest in spread trades (futures and options) and the price of WTI. Without knowing more about the structure of the time spreads (a study that goes beyond the scope of this report but which might yield some interesting results), it is difficult to know exactly what the implication of this correlation is.

Having reviewed these issues, it is important to note that neither hedge funds nor any other cohort of the speculator community are infallible. There are limits to the ability of speculators not only to anticipate but also to influence markets. While WTI is an excellent vessel for holding traders' fears and hopes, the very complex dynamics of global crude oil physical demand and supply exerts itself inexorably, albeit opaquely (because of the highly imperfect state of world crude supply and demand data).

There is an inclination, especially among traders, to assume "the financial market is always right." The record clearly shows, however, that speculators are far from infallible. As the example of Amaranth (and its predecessors like Long Term Capital and Metallgesellschaft), they often make mistakes. Their mistakes are visible both in outright and in spread trades.[25]

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[24] It is important to note that the charts match *weekly* COT data with the price of prompt (first month) WTI. Correlation statistics are highly sensitive to the time period chosen, which is consistent with a theory that the influence of financial markets on oil prices waxes and wanes. The inter-relationship between events in the physical market and financial markets are extremely complex.

ESAI has maintained a proprietary database of crude oil supply and demand (aka, refinery intake of crude oil) since 1984. It has developed several metrics of the condition of global crude oil supply and demand. One of those metrics, ESAI's "Crude Balance," which measures the surplus or deficit of crude supply versus demand, indicated for the winter and spring of 2003 that, while the speculators were aggressively short-selling WTI, the global fundamentals were quite tight. At the same time, there were plenty of political issues (tensions in the Middle East, deteriorating supply conditions in some exporting countries) that were keeping market participants – with the exception of speculators in the WTI market – extremely apprehensive. Thus, the spring of 2003 represents a case where "the non-commercials" had a bearish view of the market, but "the fundamentals" drove the market the other direction.

Regulatory Implications

Our ongoing evaluations of the ebb and flow of demand and supply in financial energy markets has caused us to focus particularly strongly on the activities of professional speculators. Speculators, such as commodity funds, move in and out of the oil markets for reasons that may have nothing to do with oil (e.g., because a trading program has noted an historic propensity for oil to move one way when pork bellies move another). It is possible that a sudden decline in demand for paper barrels – occurring because one or more large players suddenly decides to abandon oil as a financial instrument – causes a decline in paper oil prices that quickly reduces the value of physical barrels.[26]

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[25] Amaranth reportedly lost $3 billion in a period of a few months by trading in the hyper-volatile U.S. natural gas market For an account, see "Betting the House and Losing Big," *The New York Times*, Sep. 23, 2006.

Given this review, it appears to me that – largely because of data quality issues -- the effects of financial markets on energy prices is (to return to Gregory Treverton's useful distinction) a mystery rather than a puzzle. As such, it is a problem that more amenable to an "intelligence" approach to analysis (as in the Central Intelligence Agency), than to a purely statistical approach. Because of the global complexities of both the physical and financial energy markets, it is unsurprising that purely statistical analysis of the relationship between specific data sets (such as the open interest of non-commercials) and energy prices.

How can energy market participants anticipate large and sudden shifts in the financial energy markets? Not easily. At first glance, COT futures data tell a simple story: there is always a short for every long. As the volume and open interest change, then the long and short positions taken by commercials, non-commercials, and small traders change from day to day and week to week. As with physical market data, the COT data are imperfect at best. They are simply clues in a complex detective story. Why did non-commercials increase their short positions? Why did commercials and/or small traders do the opposite?

We agree with Mr. Greenspan and others who believe organized speculators now affect the value of many of the assets involved in world trade. No one would object to this if only soft drink prices were affected by their activities. But when they drive up the price of the fuels that keep people from freezing, of the equities that hold the store of wealth of savers, and of the currencies that determine a nation's stature in world affairs, it is no wonder that we hear cries of alarm from government officials.

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[26] Newspaper accounts in January 2007 indicated that "Wall Street commodity funds that have been investing heavily in energy futures are now loading up on agricultural commodities like corn and livestock futures." See "Wall Street is Betting on the Farm," *New York Times*, January 19, 2007.

In the United States, calls for reform of the rules governing speculation tend to focus on two issues: *greater disclosure* and *larger margin requirements*. On the disclosure front, the U.S. Commodities Futures Trading Commission, during the tenure of the Bush Administration, has been disinclined to apply futures-style disclosure requirements on the burgeoning over-the-counter market.

The implosion of Amaranth, however, has rekindled calls for greater disclosure.[27] The most prominent specific measure that has surfaced in Washington, DC is the "Oil and Gas Traders Oversight Act of 2006."[28] The act – only two pages in length – simply requires that "The [CFTC] Commission shall prescribe rules requiring such regular or continuous reporting of positions in a *reportable contract* in accordance with such requirements regarding size limits for reportable positions and the form, timing, and manner of filing such reports under this paragraph, as the Commission shall determine." A *reportable contract* is defined as "a contract, agreement, or transaction involving an energy commodity, executed on an electronic trading facility, or a contract, agreement, or transaction for future delivery involving an energy commodity for which the underlying energy commodity has a physical delivery point within the United States and that is executed through a domestic terminal."[29]

Critics of this legislation contend that such disclosure will simply cause the trading activity to migrate away from the United States. This seems disingenuous: one of the reasons these markets use American futures contracts as benchmarks is because they have faith in the underlying integrity of the American financial system, in comparison with the alternatives. There seems to us to be no compelling reason not to require such reporting, at least for US-centered trade, and for European and Asian regulators to implement similar reporting programs.

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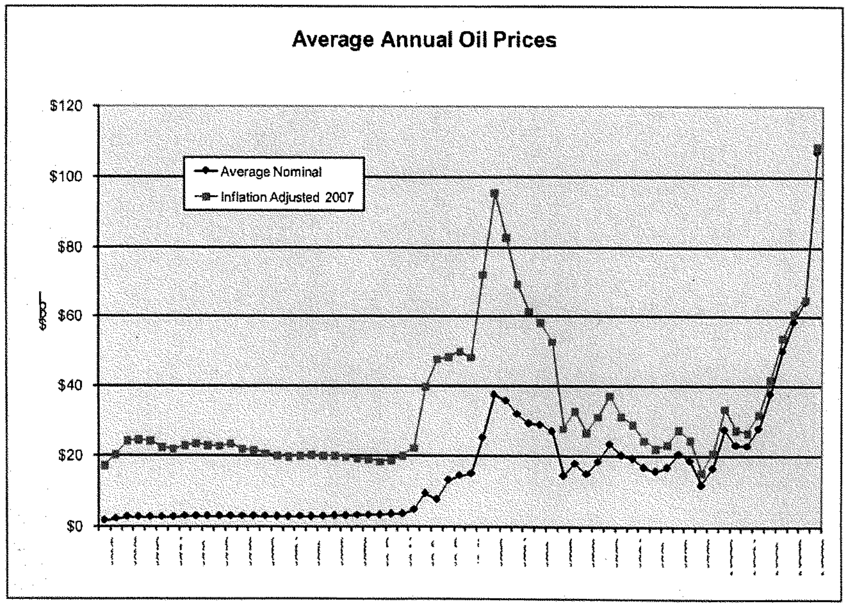
[27] See in particular, Coleman and Levin, *The Role of Market Speculation In Rising Oil and Gas Prices: A Need To Put the Cop Back On the Beat*, Staff Report, Permanent Subcommittee on Investigations, U.S. Senate, June 27, 2006, page 3.

[28] The influential business journalist of the *New York Times*, Gretchen Morgenson, called for passage of the Act in a September 24, 2006 article titled "Dangers of a World Without Rules."

[29] *Oil and Gas Traders Oversight Act of 2006*, available at http://thomas.loc.gov/cgi-bin/query/z?c109:S.2642:.

On the issue of *margin requirements,* we believe the influence of speculators cannot be eliminated without throwing the baby – the efficacy of market forces – out with the bath water. Government officials and most well-informed market participants are aware that markets cannot thrive without the depth and liquidity speculators add to markets, without speculators to embrace the risk that others shun, and without speculators' restless pursuit of new financial instruments that – in spite of all of the concern about derivatives – still promote financial flexibility and creativity. In short, speculators make markets work better, albeit at a cost.



Average Annual Oil Prices

Source: http://www.inflationdata.com/inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp

The cost, as both the academic literature and practitioners recognize, is greater volatility. Markets with higher concentration of professional speculators tend to exhibit greater price volatility. In the short run, say, over a couple of months or at most a few years, this volatility is inconvenient and even painful to those on the wrong side of the price cycle. Thus, the relatively high oil prices of 2002 to 2008 are painful for consumers, the low price of 1998 for producers.

In the long run, however, we find that commodity prices and exchange rates in freely traded markets tend to return to an economically rational level. Thus, oil prices – thought in the late 1970s and early 1980s to be on a constantly rising path – in fact showed a remarkable propensity to return to a very long-term average level of around $25 per barrel, as shown in the chart above, which depicts oil prices since 1946 in inflation-adjusted terms. After 2000, the price ratcheted up to levels not seen (in real terms) since the 1980 oil crisis. It appears from our analysis that the increase in demand for paper oil barrels over the past several years helped to drive those prices up. But if we have learned one thing about commodity speculators over the years, it is that they are quite willing to trade a commodity down as well as up. Thus, if the fundamentals of oil – the supply curve, the levels of demand, and inventories – conspire to drive short-term prices back down to that long-term $25/barrel level, speculators will ultimately help to get it there.

If the desire to regulate speculators further cannot be restricted to just additional disclosures, the most direct and effective measure would be to reduce their leverage by *increasing the margin requirements in exchange traded markets*. Funds and exchanges, of course, will resist this suggestion because it would adversely affect the liquidity of their markets. And so it would, but if this segment of the financial community does not regulate itself more effectively, chances increase that governments will ultimately regulate them, perhaps out of existence.

It behooves the defenders of the new *status quo* – market economists, investment bankers, and Fund managers – to do everything they can to shed maximum light on these markets. There is still an astonishing lack of disclosure of some of the information that helps make market forces explicable. Until January 2007, for example, only the American futures markets were required to collect commitment of traders data. In the future, it is likely that OTC markets will have to do so[30]. Such vital market information as petroleum inventory levels are still not published in a timely basis by the leading oil producing countries. Saudi Arabia, the world's largest oil producer, fails to publish any timely details of its operations[31].

Thriving markets have an insatiable appetite for information. It is up to governments – the same ones that have surrendered some of their controls to the market – to ensure that adequate flows of information exist to feed the markets to which they have entrusted their fates. Governments must insist that those who sell critical commodities and associated financial services – whether it be Saudi Arabia or ICE or NYMEX – disclose enough information to ensure that known abuses (like insider trading), and preventable problems (like development of market power by an aberrant single hedge fund or herd of funds) do not fatally undermine the efficacy of the markets. At the end of the day, markets exist because governments allow them to. Support for oil, gas, and electricity markets is ebbing, inside and outside the United States, and advocates of markets as the best way to organize energy activities must do all they can to shore up that support.

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[30] On January 30, 2007, *Platts Energy Trader* reported that ICE was reporting large gas trading positions to the FTC on a daily basis.

[31] See, however, www.JODIDATA.org for information about the Joint Oil Data Initiative, which is headquartered in Saudi Arabia.

Mr. STUPAK. We will begin questioning. I think we'll probably go one or two rounds with this panel. So we'll try to keep it at about the 5-minute point.

Mr. Gheit, if I may, your testimony says that the doubling of crude oil prices in the past year was mainly due to excessive speculation, not due to an unexpected shift in market fundamentals. What do you mean by excessive speculation?

Mr. GHEIT. Well, we look at the base case. A year ago, oil prices were about $60, $65, and everybody expected that oil prices would probably come down, not go up because we started the year, if you recall, at almost $50 oil. Actually the end of, 2006, I believe, that OPEC had to cut production to prevent a meltdown, as you called it, in oil prices.

So last year, as oil prices went to $60 or $65, all of a sudden we had finally outages and that was because—or at least that was what the speculators put as the reason for why we should put oil prices up. But the fact of the matter, even—oil prices should be going down, not up. Because there was not enough refining capacity to use the excess oil on the market.

Mr. STUPAK. So if we have excess oil now on the market, and in your testimony you go on and you say, large investment banks keep fanning the flames by making exaggerated price predictions that they believe they can help achieve, given the Government's unwillingness or inability to hold them accountable. As you know, Goldman Sachs recently predicted that oil prices of $150 to $200 a barrel and yet are probably the largest commodity dealer on Wall Street. Without singling out any particular company, is there an actual or apparent conflict of interest in an investment bank taking up the price of commodities through its research arm while speculating on it at the same time?

Mr. GHEIT. Absolutely. Unequivocally and absolutely. I mean, it becomes a self-fulfilling prophecy. When the largest trader predicts the price of a commodity, guess what's going to happen to the price?

Mr. STUPAK. It's going to go up.

Mr. GHEIT. It's going to follow the leader.

Mr. STUPAK. Let me ask you this. The Securities and Exchange Commission prohibits insider trading by requiring disclosure when investments exceed 5 percent in a stock. However, there's nothing comparable for commodities. What would be the best way for Congress to address this matter? Should all investment banks and other noncommercial interests have to make public their holdings of oil futures or inventories?

Mr. GHEIT. Absolutely. Absolutely. Disclosure is the best thing. As somebody has said, they operate well in the dark. When you shed the light on them, there's no place for them to hide. There are a lot of conflicts of interest. They create this financial instrument that nobody really knows how it works except they themselves. They create—this is the black box, if you will. And it pulls on currency, it pulls on the stocks, it pulls on other things. So once you catch one, the other will go unnoticed. So it's impossible for us to quantify the impact because it has a lot more to do than only the commodity.

Mr. SESTAK. Thank you. Mr. Masters, how much do you estimate that crude oil prices have been inflated by excessive speculation above supply and demand fundamentals? In raising concerns about the multitude of commodity index investing, are you suggesting that supply and demand fundamentals have no role in oil prices?

Mr. MASTERS. Thank you, sir. Basically what I'm suggesting is that there is supply and demand fundamentals. But in this case, what we've got is we've got supply and demand and demand. We've got financial investor demand that we've never really seen before in these markets. And that long-only financial investor demand has come into these markets, has altered the price discovery function of the markets, and has altered the price.

So when we talk to physical producers, refiners, consumers of energy, they all tell us basically the same thing, that they think that crude oil should trade somewhere around the marginal level or equilibrium level of the cost to produce, the marginal cost of production, which they tell us is in the neighborhood of $65 to $70 a barrel.

Mr. STUPAK. So it should be at $65 or $70 a barrel now before the speculators get to it?

Mr. MASTERS. That's what they tell us. I mean, one of the important points here is that—just as I can't specifically tell you what the number is from the speculators, I can't specifically tell you, or neither can anybody else, what the specific level of prices would be from China or India or any other component in the price. But I think there's clearly a great deal of the price that is coming from excessive speculation.

Mr. STUPAK. Let me—Kyle, turn to number two if you will, please. Let me ask you this question, I'm using Commodity Futures Trading Commissions's data now. And we estimate that 71 percent of the trading on the West Texas Intermediate crude oil contract is done by speculators. And only 29 percent by physical hedgers. The CFTC weakened its regulations in 1998 by allowing its changes to set soft accountability levels instead of hard position limits for commodities like oil.

You recommended in your testimony setting hard speculative limits for immediate month in the cumulative for all the months. Those speculative limits effectively wring out the excessive speculators without damaging the important role traditional speculators play in the commodity markets?

Mr. MASTERS. I think so. The analogy I would use here is, it's like filling up your tires with tire pressure. If your tire pressure—if you need 30 pounds of tire pressure in your tires and you only put 10 pounds of air in there, you need more or you're not going to be driving very well.

What we've got here——

Mr. STUPAK. Wait a minute. It's just going to buzz for a second here.

OK. Go ahead.

Mr. MASTERS. So what we've got here is a situation in which people are trying to put 60 or 90 or 120 pounds of pressure in the tire. You know eventually the tire's going to explode. It doesn't work. So we need sufficient speculation. But we don't need unlimited speculation. A little speculation helps grease the engine, helps grease the wheels, if you will, allows the purpose of the futures markets to work, which is price discovery and risk reduction for actual physical hedgers. The genius of the 1936 Commodity Exchange Act was that it allowed the functioning of the markets, it allowed speculators to participate in the markets, but it didn't let speculators dominate the markets. So position limits allow enough speculation to occur to grease the wheels but they don't allow speculators to dominate the price discovery function of the market, and that's the idea.

Mr. STUPAK. One last question, and then I'll go to Mr. Whitfield. And we'll go a second round because I do have questions for Dr. Krapels and Mr. Diwan. Both Secretary Paulson and Secretary Bodman have argued speculation is playing no role in the rising oil prices, the CTFC seems to agree with them. What are the costs of inaction, in your view, if Congress fails to address this matter? Will it correct itself?

Mr. MASTERS. Caines had a great expression. He is a famous economist. He said, "In the long run, we're all dead." This is a situation in which this crisis needs to be solved. If this is an acute crisis. You know, what we have got here is we have got someone that is morbidly overweight. That person clearly—there are chronic solutions to his problem. He probably needs to diet. He probably needs to exercise. There's a lot of things that he needs to do. But right now he's having a heart attack. And if we don't take action right now, then we're going to have a real problem. This is an acute problem right now.

And this is a problem that can be solved very quickly with changes in the regulatory framework. So I think, as I've said in my testimony, I think the time for studies and examination has passed. You know, like the FDA does, let's do the studies before we allow the approval of a drug to come to market.

So basically, I think that if we do some of these actions, some of the things that I'm talking about, we can greatly deal with this amplification of prices created by excessive speculation. And then we'll have time to deal with some of the chronic solutions for the energy infrastructure in this country.

Mr. STUPAK. Thank you. Mr. Whitfield for questions please.

Mr. BARTON. Parliamentary inquiry, Mr. Chairman. We normally do 10 minute questions, rounds. You took almost 10 minutes in that one. Are we doing 5 minutes just because of the number of panels?

Mr. STUPAK. By number of panels, number of people who are interested, we'll probably go two rounds.

Mr. BARTON. OK. Thank you.

Mr. WHITFIELD. Mr. Masters, you just indicated that this problem could be solved rather quickly if we took steps regarding the regulatory monitoring of speculators in the market. Let's say the Congress passed legislation adopting these regulatory changes and the Senate passed it and the President signed it, how soon would we see a significant reduction in retail gasoline prices?

Mr. MASTERS. Without being able to predict the future, my estimation would be within 30 days.

Mr. WHITFIELD. Within 30 days of the President signing the bill?

Mr. MASTERS. Yes, sir.

Mr. WHITFIELD. OK. Now I'm going to ask you another question, how much would they be reduced roughly?

Mr. MASTERS. I'm not sure I have a crystal ball that great. I would just go back to what I said earlier. My sentiments is prices would probably drop over a reasonably short period of time back to somewhere closer to the marginal reduction cost of oil.

Mr. WHITFIELD. Of $65 to $75 a barrel?

Mr. MASTERS. $65 to $70, then I think it's reasonable to conclude that that is about halfway where prices are today. I would think that gas pries would reflect that in relatively short order.

Mr. WHITFIELD. So you are saying if we adopt these regulatory changes, we could almost cut the retail price of gas in half in a relatively short period of time?

Mr. MASTERS. Yes.

Mr. WHITFIELD. Dr. Krapels, what do you say?

Mr. KRAPELS. To the chagrin of some of my colleagues at the company that I work in, I tend to agree with Mr. Masters. I think the amount of speculation is really substantial. And I don't think it would take 30 days after the President signing the bill. I think it would happen more quickly than that. Once the market understood this was happening, I think a lot of the funds would withdraw their positions and try to liquidate in as orderly a fashion as they could.

Mr. WHITFIELD. Mr. Diwan, what do you say?

Mr. DIWAN. I don't know how quickly it takes to get prices down. But it's clear that prices will reflect closer to marginal cost of producing oil. I think the marginal cost is slightly higher than what Mr. Masters just said. But that could come fairly quickly. It can overshoot on either side. But what's interesting is that the long-term price curve, so how futures, price of oil do 5, 10 years, right now is around $140. And that is the expectation, that prices continue to stay at these levels at a marginal cost, which doesn't make a lot of sense.

Mr. WHITFIELD. Mr. Gheit.

Mr. GHEIT. Well, let me start——

Mr. WHITFIELD. Pull the mike up please.

Mr. GHEIT. Let me start by saying the marginal cost is a moving target. Because of the chicken-and-the-egg situation. The reason that you have higher marginal cost is because where oil can be obtained very cheaply, we're locked out, whether it's Russia, whether it's Iraq—Russia can produce oil under $10 per barrel. Iraq can produce oil at similar or even lower. So the marginal cost is a moving target. The fact of the matter is, if you look at the finding and development costs of the industry, in the last 5 years, it averaged less than $15. There is a rule of thumb that the price of the commodity is not sustainable at more than triple the replacement cost. So it should be around between $45 and $60.

So, meeting with the head of most of the oil companies that we cover, only a year ago they were amazed at the sustainability of $60 oil. The chairman of the largest oil company in the world 5 years ago said at the time he doesn't see any justification for oil prices above $40. So the world has not changed significantly over the last few years to justify $140. And then you have people predicting $200 oil. If we don't do anything about it, their prediction will come true.

Mr. WHITFIELD. But you're saying the production of oil is way over $15 a barrel. I mean, production cost——

Mr. GHEIT. It's just replacement costs of the reserve in the ground. There is another $15 or $20 to extract it. And then there is $15 or $20 per barrel which is the profit and taxes. That's how it works. It's the one-third rule.

Mr. WHITFIELD. My time has expired.

Mr. STUPAK. Mr. Inslee for questions, please. I should note Mr. Ross has joined us, a member of the full committee not the subcommittee. But we would appreciate it if you want to submit an opening statement, we'll accept it and you will have time to ask questions.

Mr. Inslee.

Mr. INSLEE. Thank you. Mr. Masters, for my opening comments, you may have noted that I have minimal high regard for this administration's capability of dealing with this problem. And I note that it was something like 9 days after you put out a suggestion in Senate testimony that we needed to have a more transparent market. Is there any reason for the CFTC not to have been engaged in this information gathering before your Senate testimony?

Mr. MASTERS. Not that I can think of, no.

Mr. INSLEE. And tell me what tools with existing statutes do you think the CFTC has to at least go in the right direction in this regard.

Mr. MASTERS. One of the things which I read earlier in my oral testimony and it's also in my written testimony is the Commodity Exchange Act enforcing that agreement—I won't read it again. But we feel like if you treat index speculators, which are effectively acting very much like each other, they look like one large speculator. If you enforce the provisions of that Act through the CFTC—and maybe that would be through the FTC, I'm not sure—but effectively you would greatly reduce their ability to engage in index speculation. So that's certainly something that you could do right away without—I'm not sure you really need much congressional action there at all to accomplish that.

Mr. INSLEE. Isn't it true that the CFTC, for years, had been issuing exemptions for these index positions and had full knowledge that there were massive positions being taken in these indexes?

Mr. MASTERS. That's correct.

Mr. INSLEE. Could you—and this is an open question. Could you, gentlemen, compare and contrast the situation—Mr. Masters uses the term demand on demand as I think, as I understood his testimony about the pernicious effects of this. Does this demand on demand problem exist in other commodities? And could you compare this to other commodities? Should we compare it to other commodities?

Mr. KRAPELS. I think a similar syndrome affects every commodity that's subject to the GSCI. The demand for paper barrels, if you will, or for paper positions or for paper contracts is a separate issue from the demand for physical barrels. And for many years, we've looked at the demand for paper barrels and just asked a question, what does it take to balance that market? If you have—if you remember Econ 101, if you have a sudden increase in demand for a commodity, it's a shift in the demand curve to the right, if you remember those awful charts. And the only way that you can get that market to equilibrate is if prices go up an awful lot. So a demand shock, which is what Mr. Masters has described for us today, is exactly what's occurred in the oil market as a result of the commoditization of oil.

Mr. INSLEE. So could you explain the financialization for oil compared to the lack of financialization of other commodities?

Mr. KRAPELS. Well, I think that other commodities have been financialized. What makes oil so interesting is that it is a global commodity. I think a lot of analysts of the correlation of oil prices with other economic indicators have concluded that oil makes a good portfolio addition for a lot of investors. So a lot of thought went into the pension fund's movement to commodities. And when they move into commodities, they move largely into energy. From their perspective, it's a rational strategy and unlike a lot of other speculators, there's no malice aforethought here. They simply do what they have to do to keep their pensioners happy. So it's a kind of an accidental overflow, if you will, into a relatively small commodity market.

Mr. INSLEE. Thank you. Mr. Gheit, I want to ask you as far as the timing of impact, if our options are to drill in some other places that we haven't drilled domestically in the United States, which I am told will take several years or decades, and taking some action to reign in some of this excessive speculation, which would have a quicker response?

Mr. GHEIT. We can put—we can put an end to speculation very, very quickly. We cannot produce oil out of those untouched areas very quickly. It will take 3 to 5 years, realistically speaking, if we start today to have a meaningful impact on our supply or demand function. But speculation, we can put an end to it in 30 days. If there is a will and there is a way to do it, we can do it.

Mr. INSLEE. There is a will. And we're looking for a way. We hope to get both. Thank you.

Mr. STUPAK. Mr. Barton, for questions please.

Mr. BARTON. Thank you, Mr. Chairman. I could ask questions all day. So I'm going to try to limit myself. My first question, I just wanted to make sure I understand generically what you guys do. Do you risk your own money or do you advise others on how to risk their money?

Mr. GHEIT. I will start. I don't risk my money or other people's money. I don't risk anybody's money.

Mr. BARTON. You don't risk any money. So you don't advise anybody?

Mr. GHEIT. I'm a research analyst. I cover 22 oil and gas companies here in the U.S. I talk to those companies regularly. I have been for almost 22 years.

Mr. BARTON. I have limited time. I just need to know if you're advising or——

Mr. GHEIT. We advise investors. We don't advise—we don't advise anybody to buy or sell crude futures. We advise investor to buy which stocks we think——

Mr. BARTON. I would like the next gentleman to answer.

Mr. DIWAN. I never invested in the oil market. I'm an advisor to a lot of people.

Mr. BARTON. Thank you.

Mr. MASTERS. The answer to your question is, we do take risks both with our own money and with other people's money. Not in commodities futures, though.

Mr. BARTON. OK.

Mr. KRAPELS. We are consultants to the oil industry, not traders.

Mr. BARTON. OK. So you're not playing in the market in the sense that you're putting your own money up or down. You're trying to give good advice in what the market is. The next question is to Mr. Diwan. If we had 100 million barrels of oil production capacity available in the world market right now, in other words, we could produce 100 million barrels a day, is it your opinion that price would be based on the price of production as opposed to the marginal demand price that we have today?

Mr. DIWAN. Well, prices would be significantly lower because basically the market will be constantly facing the risk that some of the OPEC producers will overproduce and increase the stocks. This is what happened in '98 when demand collapsed. When you have a large spare capacity, you give incentive to anyone who owned that capacity to produce.

Mr. BARTON. Which is what we had until about 5 years ago, according to your chart.

Mr. DIWAN. Exactly. And we built that spare capacity, if you want, by accident, over the '80s when we significantly reduced demand. And—or when prices were very high and we were able to invest to increase production. The problem we have right now here is we have very high prices, but that has not changed the supply function. We have not been able to increase our supply globally outside of OPEC over the last 5 years which tells me there is a problem and that problem in a way is what's attracted a lot of money into the oil complex.

Mr. BARTON. I want to go to Dr. Krapels next. And I've had conversations with all the major CEOs of the American oil companies in the last 4 or 5 years, in some cases, the last 4 or 5 weeks. And what Mr. Gheit said earlier about—he didn't mention by name. But I know who he's talking about because I had that same conversation 2 years ago when the prices started jumping up in the $70 to $80 a barrel range, I was told that those prices couldn't last, and so the majors didn't make the capital investments. In some cases they didn't have places to invest in. And in other places they just didn't believe that the high prices were realistic. Dr. Krapels, do you believe now that there's enough evidence over the last 2 years that it would make sense for the major privately owned oil companies of the United States to make these huge investments based on $100 a barrel oil or $120 a barrel oil?

Mr. KRAPELS. No, sir. I don't think they're going to make those investments. I think they will be looking at on the margin, something like the Tarsans in Canada as perhaps the marginal—the large source of marginal supply. And that could be recovered in the $60 per barrel category. I don't know a single oil company that would make $100 investments because I think they believe this price is unsustainable.

Mr. BARTON. Let me ask the next question. Since you gentlemen are reputedly some of the most expert people in the United States on where the oil markets are, if you were advising Exxon-Mobil or Chevron Texaco or Conoco-Phillips, what price would you advise them on to base their investment decisions on in terms of major capital investments for new production? What's the price you would advise them on?

Mr. GHEIT. Let me take this question since I talk to these companies on a regular basis. I would say between $45 to $60, no more than $60. Actually, they said themselves they do think that any oil company that spends an oil price above $60, they would be very disappointed

Mr. BARTON. Forty-five to sixty. Thank you. Mr. Diwan.

Mr. DIWAN. Well, it is the chicken-and-the-egg thing here, because what you have at the same time oil prices rising to $140, but if you invest too much money, Wall Street will slam you because you are overinvesting. If you are investing, if you believe these prices will stay. So you have—if you want the mechanism. I think certain marginal projects right now are invested at $100 in the oil sand. And the reason I think the prices are much higher is because we need the very big energy input.

Mr. BARTON. What price would you put your reputation behind?

Mr. DIWAN. Below $100.

Mr. BARTON. Below $100. OK. Next, Mr. Masters.

Mr. MASTERS. That's not going to be my field of expertise but I would think that price would be below $100.

Mr. BARTON. OK. Below. Dr. Krapels.

Mr. KRAPELS. Congressman Barton, did you see the movie There Will Be Blood?

Mr. BARTON. I have not. I do know who Pogo was. I'm one of the few people old enough to remember Pogo.

Mr. KRAPELS. There is a wonderful scene in that movie of a man in California digging a deep well until he reaches oil. And I went to the movie with my wife. And we said, that's the marginal producer. He's dug a well by hand and that's the $130 per barrel oil right there. I'm in the $60 camp.

Mr. BARTON. Are we going to have another round, Mr. Chairman?

Mr. STUPAK. Yes.

Mr. BARTON. I will yield back.

Mr. STUPAK. Thank you. Mr. Green for questions.

Mr. GREEN. Thank you, Mr. Chairman. Like my colleagues, I apologize for being late because this is an issue that's so important to our country. And I'd like to ask unanimous consent that my statement be placed into the record.

Mr. STUPAK. Without objection.

[The information follows:]

STATEMENT OF HON. GENE GREEN

Mr. Chairman, thank you for holding this second O&I hearing today on energy speculation.

This hearing could not be more timely.

Gas prices are hovering over $4 a gallon nationwide, and every day I hear from constituents back home asking me what Congress can do to bring down the skyrocketing cost of energy.

As a Representative from Houston, Texas—the energy capitol of the world—I know there are no easy answers or quick fixes.

Energy prices are set on the world stage and are influenced by a variety of factors.

Global crude prices, increased demand from India and China, reduced energy supplies, extreme weather conditions and geopolitical events all play a part in price formation.

While I agree that as a nation we should both conserve and invest in renewable sources of energy, I also believe we need a long-term strategy of increasing domestic oil and gas supplies to help mitigate basic supply and demand fundamentals.

I hope with today's prices many of my colleagues will agree to this basic tenant of a balanced energy policy.

What also concerns me are reports by several economists and analysts that question whether the standard economic principles of supply and demand are no longer the primary factors affecting energy prices.

In recent years, the percentage of physical hedgers who actually rely on the market to lock in future selling prices is being dwarfed by the entrance of speculators who never take physical delivery of oil and gas supplies.

Some estimate that commodity index speculation has increased 1900 percent since 2003, and the number of futures contracts has also hit record levels.

Commodity index speculators -- comprised of sovereign wealth funds and pension funds -- are entering the market in droves to diversify their portfolio assets and hedge against inflation.

Foreign boards of trade, which operate outside of the jurisdiction of the Commodities Future Trading Commission, are also heavily trading West Texas Intermediate futures contracts here in the U.S.

If energy prices are indeed being manipulated by the influx of speculators and unregulated foreign boards of trade, the consumer runs the risk of paying distorted prices to drive, fly, and heat and cool their homes.

Legislation has been proposed in this Congress, including by my good friend Chairman Stupak, that seek to bring more accountability to commodity transactions.

Our highest priority in Congress should be to foster fair, open, and transparent markets for American consumers, businesses, industry, and utilities.

Mr. Chairman, I hope today's panel will help flesh out these very complex issues, and I look forward to working with you and other members on improving the transparency of our energy markets.

I yield back the balance of my time.

Mr. GREEN. Mr. Masters, according to the CFTC data, ag institutional investors are overwhelming on the wrong side of the market in ag subsidies in betting that prices will continue to rise. Do you think that's true with energy as well? If so, why is that given that many analysts believe prices are too high and are due to a downward correction?

Mr. MASTERS. So the way that institutional investors today are predominantly investing in the commodities futures markets is through a strategy called index replication. This is based on the Goldman Sachs and the Dow Jones AIG index of commodities. In the Goldman Sachs index, for instance, there are 25 key commodities. When they invest, they invest in every one of these commodities simultaneously many times. I mean, they're buying an index. And so whatever weight that index is, is for that specific commodity future, is in that index, is what they're going to invest in that specific commodity.

So, for instance, West Texas Intermediate, they're going to put 40 percent of every dollar they put in the index into West Texas Intermediate because 40 cents of the dollar goes in there by virtue of the index.

For some of the other commodities, like wheat, I believe, that's 2 percent.

Mr. GREEN. I only have 5 minutes. We may have a second round. But if you could give us a more concise—I have questions for the other panelists.

Mr. MASTERS. OK.

Mr. GREEN. But that's generally the idea?

Mr. MASTERS. That's generally the idea.

Mr. GREEN. Has rapid run-up in oil prices adversely affected oil producers who have sold their production at lower pricer earlier? And has this led margin costs? And how costly has this been?

Mr. MASTERS. That's been a very big issue. You know, some of the investment banks have said, well, we should really be applauded for helping drive up prices because this has allowed other hedgers to be able to hedge at higher prices. And I agree with them that they've helped drive up prices. More importantly though——

Mr. GREEN. I think they would probably be in a really small minority in our country, even from the oil patch where I come from.

Mr. MASTERS. Yes, sir. Right now the problem is, as you suggest, many people that used to hedge because of the price volatility that's been created in these markets are now not hedging. So some of that supply that would have come on the market is not coming on the market because people are literally afraid to hedge. We've talked to a lot of physical producers, some of which did hedge at much lower prices and have had to cover or rebuy what they sold at much higher prices which has had a very—in some cases force them out of business.

Mr. GREEN. OK. I have a question for all the panelists, John Hofmeister, the previous CEO of Shell, recently suggested by restricting access to domestic supplies, U.S. policymakers are sending a signal to investors that output would be constrained, thereby driving up the price. He said, "there is no confidence that we can explore and produce more barrels given the United States is not letting us do it, and that it's preventing people from having optimist outlook on oil futures. So it looks like demand will continue to run ahead of supply." Do you agree with this assessment? And would increasing domestic supplies of energy here at home send the right signals to investors, for that matter, foreign nations that the U.S. is serious about meeting its own energy needs, thereby reducing speculative prices?

Mr. GHEIT. I agree.

Mr. DIWAN. They think the problem is bigger than just the United States being able to produce more. The question is, can the world produce more and where is that oil going to come from.

Mr. KRAPELS. I agree with Roger. There's a limit to how much more we can produce. Even if we open everything up—all of our frontiers areas. But it sure would send the right signal if we did.

Mr. MASTERS. I would just go back to what I said before about there's an acute problem and there's a chronic problem. And the chronic problem is long-term energy security. The acute problem is financial speculation in the commodity futures markets.

Mr. GREEN. Mr. Chairman, I know I'll wait for the second panel. But I appreciate the opportunity. There are a lot of things we can do. And I think your effort is in one of them as we look at the speculating market. But there are other things that we can do that would actually make the price of fuel much cheaper for our constituents. Thank you.

Mr. STUPAK. Thank you, Mr. Green. Mr. Burgess is not here. Mr. Walden for questions.

Mr. WALDEN. Thank you, Mr. Chairman. I appreciate that. You know, farmers are very good at reducing the price of their crops. They do so by reacting to price signals and when wheat or corn prices are high, they all rush out and plant wheat or corn, whatever is high. As a commodity, the oil market is not much different. It would—you'd think that with prices at this level, there would be avid exploration so you could take advantage of it. Mr. Diwan, is that not the case in the oil market?

Mr. DIWAN. Well, you need to have access to areas which have good reserves to explore and to produce. And this is really the first time when you have such an increase in prices where we have not had a response on the supply side. And there's a lot of reason for that, not only that you don't have access to the best basins in the world, 77 percent of the world reserves are closed basically to oil companies.

Mr. WALDEN. Where are best basins?

Mr. DIWAN. In OPEC countries or in Mexico or in a number of areas where you do not have access to the reserves. The other issue is, you have a lot of aging fields where the decline rates are accelerating. So even if you are bringing a lot of new supply on the market, it is just replacing what we're losing every year. So to recall on our jargon, the wedge, and that wedge is growing bigger and bigger every year. So if you bring 4 million barrels per day of new supply this year, you basically stay put because you have lost 4 million barrels per day.

Mr. WALDEN. So supply and demand does play a significant role in the decisionmaking by those in the market?

Mr. DIWAN. Absolutely. And there's a supply narrative, this notion that we don't have supply increase in the future which has brought up a lot of the financial players in the market because basically they're not taking a lot of risk here. Due to the way I describe it is you really have two types of news in this market. You have the bullish news, when something happens in a small country or you lose a little bit of production or the very bullish news when something big happens like in Nigeria. You don't have risk on the downside. And that shift of the risk from all upside to little downside is what's attracting the speculators to the market.

Mr. WALDEN. And by that—I'll wait. You see you won the prize for the best answer. There will be six of them. We're adjourning the House right now, I think.

So by that, you're saying that there's little risk that we're going to add significantly to supply, which is why then the speculators continue to bet long saying, I don't see the price coming down.

Mr. DIWAN. Correct. What can bring really the prices down in this environment is a demand going down, and for demand to go down as we see it right now, it takes prices to increase. So as the more you push prices, the more you'll increase risk. But we—it's difficult to manage in the demand collapse if you don't have an economic collapse.

Mr. WALDEN. Well I'll tell you, in my part of the world, there are people who are beginning to think we are having that economic collapse. When you look at the doubling of the price of fertilizer and diesel and every other input and then you go to the grocery store and the price of food's going up. I'll tell you, family budgets are in pretty bad shape.

Mr. DIWAN. But in the rest of the world, demand is still growing. So we still have a decent demand growth right now despite these prices. And the reason is price subsidies. So if you look at the demand growth in the world, it's really concentrated in two areas of the world. It's in China. It's in the Middle East. And it's in some countries which have large mining operation because you have the commodity boom. So the demand in these areas is not very responsive to prices so it continues to grow.

Mr. WALDEN. Because demand in the U.S. has actually gone down, hasn't it, at the steepest curve since World War II. It used to be if that happened, we'd affect the market and the price, right?

Mr. DIWAN. But that's been the trend if you want over the last 6 years. If you take the global growth and demand over the last 6 years, the cumulative growth of demand over the last 6 years, over 80 percent has happened among the OECD countries. So the OECD countries, developed countries have a smaller impact on the demand side because of the price signals, because of policies being put in place, et cetera, et cetera. While where you have price subsidies, demand keeps growing because you have population growth and economic growth.

Mr. WALDEN. So it looks like you have a three-part problem here. One is the weak dollar which is related to our economy. Two is the transparency, perhaps, in the trading itself and new investors coming in that never planned to take possession of the oil or the gasoline. And three is this belief and probably based in reality that nobody's turning up the spigot or they can't.

Mr. DIWAN. They can't.

Mr. WALDEN. Because some of those fields are actually going down, not up. And meanwhile the United States puts 80 to 85 percent of its offshore oil potential out of reach by Federal law and 60, 70, 75 percent of the onshore is not accessible by Federal law. And there's no evidence we're going to change those laws. So from a U.S. perspective, unless we change the law, which I think we should, and at least send a signal that we are serious about becoming more energy independent, we're going to continue to see these high prices.

Mr. DIWAN. Correct. But the way we look at it, we try to look at it globally. It's very difficult to imagine how the world is going to produce 15 million barrels per day more than what we are producing now, and how that world is going to be able to consume 100 million barrels per day.

Mr. WALDEN. And one final question, if I could, you said earlier I believe—I had to step out for a minute—but in terms of price signals for the future, something under $100, right?

Mr. DIWAN. Correct.

Mr. WALDEN. How far under $100? $30? $99?

Mr. DIWAN. To produce energy it requires a lot of energy. So the higher the price, the higher the marginal cost. We are seeing right now some investment where the companies are assuming prices over $80.

Mr. WALDEN. Wow.

Mr. DIWAN. And if prices shoot down below that or below, at $60, all the marginal projects above $60 will immediately stop and that, again, will impact on the supply and it will further reduce supply and accelerate the decline rates.

Mr. WALDEN. All right. My time has expired. Mr. Chairman, thank you. Thank you to our panelists.

Mr. STUPAK. Thank you. Mr. Ross for questions, please.

Mr. ROSS. Mr. Chairman, thank you for including me, allowing me to be a part of this subcommittee for the purpose of this discussion today because this is, in my opinion, a very critical issue facing our country and, quite frankly, the world. I think from what we're seeing happening in the energy market has a lot to do with this economic recession that we're in and how fast we get out of it.

Mr. ROSS. My question for any of you who—in any form or fashion—participate in either trading or encouraging others to trade in the futures market, could I just get a show of hands? Which ones of you are involved in that, anyone? No one will admit it? So let me ask you this: do you know people who trade in the futures market?

Mr. DIWAN. Sure.

Mr. KRAPELS. Of course.

Mr. ROSS. Everybody does. In your opinion, doesn't have to be scientific, but based on your expertise, what percent of those who play the market could actually accept delivery of diesel fuel or gasoline if they had to?

Mr. KRAPELS. It's a tiny fraction. It's less than 1 percent of all the trades that are done physically.

Mr. ROSS. So all the people playing the markets on diesel and gas and oil and all that, you're telling me that that's the 1 percent of all those that are doing that could actually set delivery if they had to?

Mr. KRAPELS. That's correct.

Mr. ROSS. Everybody agrees to that?

Mr. MASTERS. I think it may be a higher number than that. Because many physical players could accept delivery but they typically don't accept delivery. They typically are just using the futures markets as a hedge.

Mr. ROSS. What would happen to oil and gas prices if only those that could accept delivery were able to——

Mr. DIWAN. Well, you can go back to a very small market. But if you have also a very small market, it's much easier to manipulate. So liquidity is very important. If you have only a few producers and a few consumers, the big producer or the big consumer could have enough muscle on that market to have a big impact on prices. So reducing market dramatically I'm not sure is a way to avoid manipulation.

Mr. ROSS. Mr. Chairman, I would——

Mr. STUPAK. If I may——

Mr. ROSS. I yield to the Chairman. That's the only question I had for this panel.

Mr. STUPAK. Let me ask this question, and it's a little bit along the lines of what Mr. Ross was just asking. And Mr. Walden brought it up about other areas that should be open to exploration in the market. But there is a proposal right now that there are 40 million acres on the Outer Continental Shelf that's not being used for exploration tied up in these leases. Should those leases, much like we do on timber sales, you can only hold them for 5 years, if you don't use it, then you lose that lease? Would that help this situation? They are talking about go and drill elsewhere, but we have 40 million acres that are tied up that no one's drilling on. Should we use-it-or-lose-it type proposal? Mr. Gheit.

Mr. GHEIT. This is definitely a good thing to keep oil companies' feet to the fire. If they don't develop the technology, if they are not willing to invest, I have no problem to renew the leases every 5 years. Let somebody else take a shot at it. You just don't hold it for future technology 20 or 30 years from now. Hoarding land is just as bad as anything else.

Mr. DIWAN. Well, again, I think this is a bit simplistic. If you look at what's happening in the U.S. the service sector is totally overheated. We don't have enough people. We don't have enough companies. We don't have drill shifts. We don't have enough of everything. We went through 20 years of underinvestment. Now we're back into the super cycle of investment. The industry is really working very hard. The notion that they're just sitting on the land and hoarding, I mean, when you work with oil companies, they're looking constantly where to put more money in the ground to produce more oil at these prices. If they're not willing to produce oil at these prices, they should be in a different business.

I don't know a lot of oil companies who are not willing to invest at these oil prices. The question is, are the land they are sitting on propitious for production? Do we have technology to look? Do we have technology to drill? Do we have the technology to hook up all of these things?

Mr. STUPAK. Why should the Federal Government put up more land if you are not drilling on the land you already have leased?

Mr. DIWAN. Well, the question is, are the lands that they have right now good land or not, or cow pasture? That is the question and when you look at an oil company every year they have a budget to spend and they are trying to push that budget as much as possible. They take the best land they have and they drill those first. And the next year they do the same and the same and the same.

Mr. STUPAK. But obviously they thought there was some value there or they never would have bid for the lease rights to begin with.

Mr. DIWAN. Right. If you look at the economics of exploring and producing oil, the cheapest part is the land. So it's easier to get a lot of land than get a lot of drill ships.

Mr. GREEN. Mr. Chairman, if you would yield just briefly.

Mr. STUPAK. Sure.

Mr. GREEN. Having owned pine trees before and comparing that to an oil lease, pine trees can grow up very well on an acre of ground, but obviously we don't want to put a derrick on every acre of ground. And if you have 1,000 acres, you'll go where you think your seismograph is the best. So I think it's a false comparison. And we'll debate that probably on the floor pretty quick. But to compare this, I don't mind a use-it-or-lose-it because if somebody is sitting on potential production, I want them to do it. But I think the numbers are probably not as—compared to a timber lease as you would.

Mr. STUPAK. It's a good analogy. That's why you call it paper barrels.

Mr. ROSS. Mr. Masters, do you care to comment on that, or Mr. Krapels?

Mr. KRAPELS. No. I think Roger has it right.

Mr. STUPAK. OK. I go to Mr. Burgess for questions. Mr. Burgess, please.

Mr. BURGESS. Thank you, Mr. Chairman.

Mr. Masters, if I could, on your four-point plan that you've outlined for us, and thank you for doing that, step four you talked about investigate physical hoarding of commodities by investors. Do you have current evidence of this occurring?

Mr. MASTERS. Yes.

Mr. BURGESS. And have you made it available to the committee?

Mr. MASTERS. I think we have, yes.

Mr. BURGESS. All right. Mr. Chairman, I would just respectfully ask that that be shared with us if for some reason I don't have that.

Mr. MASTERS. That wasn't in the footnotes. It's in the footnotes, but the actual documents we've submitted to the Chairwoman.

Mr. BURGESS. All right. Bloomberg on their print side in the June 16th—in the June 16th article, they talk about 15 supertankers stationed in the Persian Gulf capable of storing more than 30 billion barrels of crude, according to ship-tracking data compiled by Bloomberg. Do you have any information about that?

Mr. MASTERS. I'll defer to Roger.

Mr. DIWAN. Yes, we do actually. You have 15 or more tankers full of uranium crude. It's a very heavy crude, it's very difficult to sell, and there's no market it for it right now. So the Iranians have two options. One is to store it or to shut the field; and the other, store it and wait for the demand to emerge when the refiners come back for maintenance. It basically outlined that some segment of the market, the one for heavy crudes, is actually very sloppy, and there's not a lot of demand for it.

Mr. BURGESS. Now, I guess one of the things I've never understood is in this whole run-up of gas prices, is why diesel shot up so much faster than refined gasoline, and would this type of crude not be suitable for recovering diesel fuel?

Mr. DIWAN. If you have the refinery tools to do it, yes. The problem is in spring in general refiners go under maintenance. But there's a different reason why diesel is doing well and gasoline not doing very well. Gasoline is a U.S. fuel. So if U.S. demand for gasoline is down, global gasoline prices are not going to do very well. Diesel is really a global commodity, and when you have high growth rates in China and the Middle East, it's mostly for diesel. So diesel is a broader commodity than gasoline in that sense. And the strength and demand both in China and the Middle East is really about diesel.

Mr. BURGESS. OK. Thank you.

Staying on the four-point plan if we could for just a moment. Dr. Krapels, do you have an opinion on the step one that established limits that apply to every market participant? I assume here we're talking about the amount that must be put up for margin and the ability to take possession of a commodity where the contract is bid upon.

Mr. KRAPELS. Am I in favor of position limits?

Mr. BURGESS. Yes.

Mr. KRAPELS. Yes.

Mr. BURGESS. And is that—of all the four proposals that are there before us, is that the one that is likely to have the most immediate and profound impact on the price? I know Mr. Masters thinks so because he wrote it and put it first. I read Dr. Krapels. I would be interested in your opinion.

Mr. KRAPELS. I think it would, of the four different recommendations that are practical, and they're likely to be acceptable. I think that is one that would get the biggest bang for the buck.

Mr. BURGESS. So it has a score, scores high on the practical scale. It doesn't seem to me to be that difficult, but then I'm not a great student of petroleum engineering. Would this be difficult to enact and create or create and enact?

Mr. KRAPELS. From a legislative or regulatory standpoint?

Mr. BURGESS. From a regulatory standpoint.

Mr. KRAPELS. I would think not.

Mr. BURGESS. I wouldn't either. And if step one by itself were taken without all the other steps taken, would that move us closer to that marginal price that we've heard talked about this morning on the panel?

Mr. KRAPELS. I think it would help. And the devil is in the details. How quickly would we establish those limits; would it be phased in or an immediate approach?

Mr. BURGESS. Well, and that's actually one of the things I wanted to ask about. What is the danger in enacting this too quickly? If we've already seen some of the difficulties we've had in the financial sector of our economy, is there an unforeseen consequence of moving too quickly in this regard, or should we just simply work to get this, at least step one, enacted and bring the cost down close to the marginal cost of production?

Mr. KRAPELS. I may be different from my fellow panelists here. I think you would want to take your time and give people some time to unwind their positions. And I think if you don't give them time, I think there could be substantial damage.

Mr. BURGESS. What is the timeline likely to look at?

Mr. KRAPELS. I would give market participants a year in which these sorts of limits would become enforced.

Mr. BURGESS. And are our other panelists in agreement with that?

Mr. MASTERS. I think that's too long. I don't think that's necessary.

Mr. BURGESS. A year is not necessary?

Mr. MASTERS. A year is more—I mean, that's—look, I mean, one of the things that's important to understand is that because commodities are uncorrelated with other asset classes, and then I don't consider commodity futures an asset class to begin with, so I'll just say that on the record, but they typically behave in ways that are different from other parts of one's portfolio. So it's very likely that prices of commodity futures, and therefore prices of commodities, would come down relatively quickly.

Now, the interesting thing about that, because today the vast majority of institutional investors' funds are still in stocks and bonds, it is also very likely that those prices would go up relatively quickly. So, yes, they're going to lose on their commodity position, which on a gross average is roughly 1 percent of their portfolio, but with a 50 percent or more position in common stocks and fixed income, they're going to way offset that in the benefit that they get in the rest of their portfolio. So this would actually have a very powerful positive effect on their portfolio.

Mr. BURGESS. Unless they were invested in the financial sector.

Thank you, Mr. Chairman. I'll yield back the balance of my time.

Mr. STUPAK. Mr. Rogers for questions.

Mr. ROGERS. Thank you, Mr. Chairman. Thank you for allowing us to participate today.

Can you give me some comparable asset classes to oil and how they might be regulated? And I'll open it up to any panelist. Is there anything comparable to oil, Mr. Masters?

Mr. MASTERS. Commodity futures, we don't consider that an asset class to begin with. They're not capital markets. One of the issues here is that capital markets investors have sort of imputed some biases on the commodity futures markets. Commodity futures markets are much smaller. They have a different set of regulations than capital markets, and because of that, they should be treated on a much different basis.

Mr. KRAPELS. I think within the energy sector natural gas seems a little bit like oil, if that's the drift of your question.

Mr. ROGERS. And it's regulated differently?

Mr. KRAPELS. I think it's regulated in many of the same ways as crude oil is. And it has some of the same characteristics in terms of the inflation of potential speculator positions in the natural gas market.

Mr. ROGERS. And so what I heard today was that it's not just speculators. Speculators are certainly a problem in the market. But we do have a demand and supply issue as we move forward. So something comprehensive both on the demand and the supply side is probably the best policy as we would move forward if we wanted to impact both prices and our ability to be immune, if you will, from governmental changes on demand. Is that correct? I mean, nuclear, coal-to-liquids, alternative energy, hydrogen, lithium ion battery, all of the things that we talk about now, including impacting supply, that would be on the demand side. But impacting supply with production would be helpful, wouldn't it?

Mr. KRAPELS. If I may, may I just take 2 minutes on that? I completely agree. If you remember Roger's graph where the price went to $65 and then $75 and then $80, and then it shot up in the last $50 to $60 of price escalation. As a commonsense matter, it's an issue of degree of price pressure. At $70 and $80 a barrel I think we will develop a lot of alternative technologies in the electric space. I think we'll develop a lot of conservation initiatives in the transportation sector. It's the $80 to $130 that it just seems as a matter of degree unreasonable and not very useful. And it's not being priced into the investment decisions of most companies that we know.

Mr. ROGERS. Go ahead, sir.

Mr. GHEIT. I just want to make a comment. The oil markets are not free markets. Let's start with that. The reason that oil prices do not respond to supply and demand fundamentals is because supply and demand fundamentals are also dictated by government houses and politics. When Russia shuts off its resources, when Saudi Arabia and the rest of OPEC said, you can't come in here. So there are artificial supply constraints, if you will.

On the demand side, as Roger said, OPEC and China and other countries subsidize oil prices, so therefore consumers do not feel the pressure that we are feeling here. So government policies obviously have a tremendous impact on why oil and gas supplies fundamentally do not respond to market rules.

Mr. ROGERS. And so you had a whole bunch of people pulling out of equities, you had a market that clearly is shown by government policy we were not going to increase supply, at least made an attractive market for these folks to jump into, rightly or wrongly, helped create the problem, didn't it?

Mr. GHEIT. But one more thing. For us to think there is one silver bullet, if you will, that's going to take care of all this problem, we're kidding ourselves.

Mr. ROGERS. I agree. So you agree that it has to be a whole series of things, and there's not a silver bullet; it is a bullet?

Mr. GHEIT. It has to be the complete course of fuel.

Mr. ROGERS. Including more domestic supply?

Mr. GHEIT. Everything should be on the table.

Mr. ROGERS. And I happen to agree with you 100 percent. And I just want to make sure we don't have unintended consequences. I know there's a lot of public pensions involved in this. And, Mr. Masters, I know you said that you could do it in less than a year. I mean, I know you're in the Virgin Islands. I assume you made that decision based on tax issues. I mean, that's an unintended consequence. We don't want you to be in the Virgin Islands. We would like you to be here. So government policy has that impact.

What happens to that $260 billion that you say screws up the discovery point, and how do you get from $260 to $4 billion without some of these public pension plans really getting turned upside down within a year? That concerns me.

Mr. MASTERS. Well, the way that happens is that, again, as I just described, these allocations in many cases are less than 1 percent of the portfolio. You're talking about a portfolio, if you will, across the board of these institutional investors that's roughly $29 trillion. So $260 billion, while it sounds like a lot of money, and it is, it's a lot less than $29 trillion.

And so just the way the math works is let's say that you've got $15 trillion in equities, and that $260 billion goes to zero; let's say the price of commodities goes to zero. That $15 trillion is going to go up probably by at least 10 percent. So you're up $1.5 trillion on your portfolio, you've lost $260 billion on your commodity side, you're still ahead by $1.2 trillion. That's not a bad trade.

Mr. ROGERS. But that doesn't have industry-specific consequences. I look at the airline industries as an example. That $260 billion is only a small fraction of the $29 trillion; however, it's having 1,000 percent impact on their ability to compete and survive. And it's not just them. It's trucking organizations, it's small midline and shortline haulers. And so that $260 billion may be a small part of the overall investment scheme, but it is having a tremendous impact, I would argue, on what advice and counsel you're giving people in the equities market, isn't it?

Mr. MASTERS. Well, I think that having commodity prices come down, and the airline people can speak to this later, would be a great benefit to the truckers and to the airlines.

Mr. ROGERS. And to consumers.

Mr. MASTERS. And definitely consumers. So you would have a much greater effect.

And just to make a point, the likely reason that the equity market would go up in value was because investors would rightly understand that, hey, this is a good thing for the economy, this is going to help things move forward.

Mr. ROGERS. Thank you, Mr. Chairman.

Mr. STUPAK. Mr. Dingell for questions, please.

Mr. DINGELL. Mr. Chairman, thank you.

Mr. Gheit, your testimony has been most helpful. I believe you said that we could end excess speculation in 30 days if we had the will to do so. Now, I would really like to know what is it that we should do to accomplish that purpose, please.

Mr. GHEIT. Well, the first thing we should do is to raise the margins requirement to 50 percent. That will slow the volume significantly. Two, you put a trading limit that will also curtail a trading volume, and then force all the financial players to fully disclose their position. That will also have an impact.

So it is going to be step by step, but if we put this legislation and we give these people 30 days to get out of their position, that's plenty of time. After all, they are big boys, they made a lot of money. And as other people on the panel said, an impact on the rest of their holdings would be significantly greater than the downside from their oil holdings. But we definitely can get this thing done very quickly.

Mr. DINGELL. Now, I believe you have said then that we should attack margins; is that right?

Mr. GHEIT. The margin requirements.

Mr. DINGELL. Margin requirements. All right. That runs about 5 percent now?

Mr. GHEIT. Yes.

Mr. DINGELL. But there are loopholes that permit it to be done at lower or no margin whatsoever. Now, what should we raise that margin to, and how should we go about doing it?

Mr. GHEIT. Well, a margin on stocks is 50 percent. Commercial players, like airlines and the oil industry, should still keep the low margin requirement, which is 5 to 7 percent.

Mr. DINGELL. Because those are people who are honestly hedging?

Mr. GHEIT. Correct. They need that to protect against the commodity risk. But those who are coming here just to hold an electronic barrel in the hopes of getting the price higher, they are absolutely, in my view, no value. They don't create an economic value in the process. What they do, they make money themselves, but obviously that is at the detriment of the rest of the economy. It's basically the few make a lot of money, but a lot of people lose a lot of money.

Mr. DINGELL. Of course, that's true with the commodities markets anyway. That's a place where the little guy gets skinned, and the big guy does fine?

Mr. GHEIT. Yes, right.

Mr. DINGELL. Now, what should the margin go to? You're indicating 50 percent.

Mr. GHEIT. Fifty percent.

Mr. DINGELL. Fifty?

Mr. GHEIT. 5-0, correct.

Mr. DINGELL. Now, the other things, if you would come back again and address them, please, again, Mr. Gheit. You said there were other things. Is the margin requirement the only thing?

Mr. GHEIT. The margin requirement is the most critical, and then the volume limitation.

Mr. DINGELL. OK.

Mr. GHEIT. We should hold the financial players to a percentage of the physical market. If the physical market is trading whatever, a million contracts a day, we should establish a limit for the financials, no more than 10 percent of the physical market. You don't want the financial market to be bigger than the physical market basically.

Mr. DINGELL. All right. Now, I have a couple of other concerns which I find very difficult. First, the foreign board of trade loophole, that's been called the London loophole by my friend Senator Levin. This allows foreign boards of trade, such as ICE Futures, to trade futures in the United States, but avoid registering as a designated contract market. They get this loophole from the CFTC through a, quote, "no action letter." Once exempted, the exchange is not subject to the requirements imposed on U.S. exchanges by CFTC.

Now, there are a couple of others here. The Enron loophole. As a part of the Commodities Future Modernization Act of 2000, the Enron loophole created an exemption for large energy traders over $10 million in assets to trade futures on unregulated markets called exempt commercial markets. ICE has exploited this loophole, and so its markets grow rapidly. This is also, by the way, known as the Goldman Sachs—no, I'm sorry. We're going to come to Goldman Sachs.

Then the swaps loophole, which is the Goldman Sachs loophole. Commercial operations like oil producers or farmers are exempted from speculation position limits if they have a bona fide price risk tied to the purchase or sale of a physical commodity. These speculative position limits are there to prevent excessive speculation. However, in 1991, CFTC began to classify swaps dealers on Wall Street as bona fide hedgers—I'm curious how they did that—and based on the argument that they have a price risk tied to financial investments in commodity index investments. Now, there are 15 investment banks and funds with CFTC exemptions under this as it has grown. Would you address these, Mr. Gheit?

Mr. GHEIT. Basically what I am suggesting is that we cannot close the door and leave the windows open because these people have a way to conduct their trading outside of the U.S. So unless and until we have a level playing field, it is not really going to bear fruit. So we have to apply the same rules that we have here in the U.S. to the ICE or any other market.

Now, the regulators in the U.K. Claim that if they clamp down on traders on ICE, they are going to go to Dubai or other places. But again, my recommendation here is to require any company doing business in the U.S. to only do their hedging on exchanges that are sanctioned by U.S. laws; otherwise it's an illegal business, it's money laundering. Basically that's it.

Mr. DINGELL. Thank you.

Other members of the panel, I want to express my thanks to each of you gentlemen for your assistance to us. Would you each give your comments on the questions that I have raised to Mr. Gheit, please? Do you agree, disagree, do you have other comments that you would like to lay before us, please?

Mr. DIWAN. Well, the problem is we don't have data to make clear judgments. We don't know how many of these index funds are using the loophole, and we don't know if they are above the limits that they are supposed to own. So if we put the limits, we don't know. There's a few large indexes with very big positions, and if we close the loophole on the limits, they'll come below that. Or if there is a lot of pension funds with small positions, then imposing a limit doesn't do much. We don't know that. We don't have the data.

So I think it will be important to close all the loopholes, because then you have a level playing field, and we'll see what happens. So you go incrementally, change the margin calls, close the loopholes and see where we are.

Mr. DINGELL. Mr. Masters, I want to commend you for your comments and your help to the Committee. What are your thoughts on the matters we are discussing?

Mr. MASTERS. Thank you, sir.

In general I agree with the suggestions. The margin requirement, I think, doesn't work as well as position limits do.

Mr. DINGELL. You say it doesn't?

Mr. MASTERS. I don't think it does. I think that—I think it certainly is, if it's applied to speculators.

Mr. DINGELL. Would it be helpful?

Mr. MASTERS. I think it could be helpful depending on how it was written.

Mr. DINGELL. I'm not sure we're going to get a cure-all here, but I'm trying to figure what package we're going to get. So you agree that a margin requirement would be helpful, but not as helpful as I would like it to be. What others with regard to the three loopholes that we have discussed?

Mr. MASTERS. You know, with the position limits, one of the interesting things about, for instance, crude oil right now is there really aren't any position limits, so you've got what's called accountability limits. You need some position limits. And the reason we suggested coming up with a committee of exclusively physical commodity hedgers and producers, consumers, is that we feel like that that group will do nothing to jeopardize their liquidity, but on the other hand they, better than anybody else, because the market is for them, will choose appropriate position limits.

The exchanges right now are for profit entities. The investment banks are for profit entities. They both benefit from larger amounts of speculation. So those entities should be excluded from this panel. The panel should be exclusively physical commodity producers and the consumers. And I think if you do that, you'll do a lot in terms of making position limits really work and really get to what Roger was saying, get to everybody they need to get to in the sense of making them small enough.

And for many of the small speculators, you will go back and put the large speculators back on a level playing field with the small speculators, because the small speculators still have to deal with position limits on many commodities. So this is on a commodity-by-commodity basis.

And then with regard to our other solutions, looking at an overall level of speculation which could be dictated by that same panel would also allow markets to function for bona fide hedgers, but not be excessively speculative.

Finally, my solution number three, that's a way of doing things relatively quickly. That could be phased in over some short amount of time. But clearly that would have the effect of greatly reducing index speculation, which we think is distorting the price of discovery mechanism.

Mr. DINGELL. Thank you.

Mr. Krapels, I hope you don't feel I've been discourteous to you. If you please.

Mr. KRAPELS. I generally concur with the observations that my fellow panelists have made. I worry about two things. One is the law of unintended consequences that if we write the regulations wrong, then we're going to see things that we had not anticipated.

Mr. DINGELL. That's an area of peculiar expertise to the Congress.

Mr. KRAPELS. And it is available for free. So I worry about that.

And I don't think you can make these changes as quickly as Mr. Masters suggests. I think you want to take your time. You're dealing with public pension funds, by and large, as the primary culprits in this story, so you want to give them time to unwind their positions.

But generally having bigger margin requirements makes a ton of sense to me, position limits and much, much more disclosure.

Mr. DINGELL. Gentlemen, thank you.

Mr. Chairman, you've been extraordinarily courteous to me. Thank you.

Mr. STUPAK. Thank you, Mr. Dingell.

Let me just go a second round here. Just a couple of quick questions, if I may. I think we've established that the excessive speculation is probably 30 to 50 percent of the cost of a barrel of oil right now. And Mr. Gheit indicated that if we pass comprehensive legislation, maybe like 6330, H.R. 6330, we might be able to burst this bubble. And if we burst the bubble, there are concerns that it would have a devastating effect on the economy. Some people have expressed that interest.

Now, Mr. Masters, you didn't seem to think so. You think that it would just shift, and the amount is so small right now because it's 1 percent, but if it moved to 5 percent, because we really don't know how big it is because we don't have the information, CFTC has not provided that information—if it goes to 5 percent, if it is around 5 percent, would that change your thought, and is there some devastating effects we have to be careful of?

Mr. MASTERS. I think that to a certain extent what we're talking about here with speculation, the right terminology really isn't a bubble, it's really more like a tumor, and it grows and grows and grows. And in this case it's hurtful as it expands. So the time to act is before it gets any worse. And so when you discover a tumor, you take it out immediately. And so I think that if we were to let this continue to go on further and further, that there could be more unforeseen consequences on the economy.

Mr. STUPAK. Mr. Gheit, did you want to comment on that, or you don't think it would have much impact if we in 30 days brought down these prices 30 to 50 percent if we passed comprehensive legislation and have the CFTC close these swap loopholes?

Mr. GHEIT. You have to understand there are obviously winners and losers. The losers are going to be the winners of the last 4 or 5 years, and the winners are going to be the consumers that are paying for gasoline up to their noses, the farmers. These are the people that are hurting and hurting pretty badly. If oil prices are cut in half, that is not the end of the world. Actually it will make most industries—the airlines will have a lot more opportunities, then the manufacturers, and everybody.

So I think there are going to be benefits that clearly outweigh the cost. And for the pension funds of all the people that invested very heavily, it's still—as Mr. Masters said, it's still a small percentage of the total portfolio. And by definition, if oil prices go down $30 or $40, the stock market is going to go up by thousands of points, and everybody will be happy. So at the end of the day I think putting an end to the speculative bubble, or tumor, as Mr. Masters put it very eloquently, I think we should have done that a year ago. It's not too late, but we should do it as soon as possible.

Mr. STUPAK. Well, let me ask this then. You've been mentioning pension funds, so I've been circling in on that. But one major investment bank told the committee that 12.5 percent of their commodity investments were held by sovereign wealth funds, yet the CFTC tells us they know of only one sovereign wealth fund investing in the futures market. Clearly there's a disconnect here with the information. Do you think it's important for the CFTC and Congress to have a clear view of the role of sovereign wealth funds in futures markets?

Mr. GHEIT. This is part of the recommendation. I said disclosure; the best thing is full disclosure. I mean, they have to break down exactly who the largest holders are, what their positions are, and how much money they are making. So before they make this outrageous forecast for oil prices, we should know exactly how much do they have to gain by it.

Mr. STUPAK. Let me ask everyone this question, if I may, and I'll end with this one. How much liquidity does the commodity market need to perform its price discovery and hedging function? How much liquidity is too much liquidity? Is the market drowning in liquidity when 70 percent of an open interest in oil is held by speculators? Kyle, I think it is chart number 2 in my testimony where you see that 70 percent of that open interest liquidity. What is the right percentage it should be?

Mr. GHEIT. Well, the right percentage should be really discussed with the physical hedgers. These are the people who need to know. Some of these trades are going to be done principle to principle, and all you need is just an intermediary. This intermediary should not dictate the price, should not take physical possession, if you will. All they have, like a broker—put the buyer and the seller, but do not get in the middle to profit from the transaction. So you know the airline, the oil companies and all these people can sit down and say how much liquidity in the system we need to have an efficient market. So I don't believe it's going to be double or triple the physical market. I would venture to say it's going to be less than 20 percent of the physical market.

Mr. STUPAK. Less than 20.

Anybody else care to comment? Mr. Diwan.

Mr. DIWAN. Yes. I remember when I started working with Ed a few years ago that actually we had a very liquid market, and we had exactly the same problems. So I would be really careful here about saying that we do not need any of the financial on the market. I think it will be a tremendous unintended consequence to the market. What we need is to have position limits and everybody abides them no matter which window or which door they come into the market. Then everybody has a playing field, and we know what's going on. But banning certain types of players or limiting as a percentage of the market I don't think makes a lot of sense because then you will have a two-tiered market.

Mr. STUPAK. Well, the market always needs speculators, doesn't it? I mean, when oil was at a reasonable price, let's say $40 a barrel, $8 to $9 was probably the speculator's fee or the risk premium or whatever you want to call it. Now we're at $65 or $70.

Mr. DIWAN. Correct. But if you go to see the pension fund, they say we're not speculating, we're hedging the portfolio.

Mr. STUPAK. And what business is the pension fund hedging against?

Mr. DIWAN. Well, it's hedging against the declining dollar. They hold huge assets in dollars which are declining in value.

Mr. STUPAK. But isn't the exception supposed to be for a bona fide exception; not speculation or hedging on the cost of the dollar, but rather the airline industry or trucking industry who really needs that hedge?

Mr. DIWAN. Well, if you have a pension fund, and the value of the stocks you're owning are going down, you're not going to be very particularly impressed by the manager of your pension fund, and you want him to do something about it. And the one thing he discovered how to do over the last 2 years is to hedge part of his portfolio on other commodities which are rising as the dollar declines. Gold is one, oil is another one, et cetera, et cetera.

Mr. STUPAK. Sure.

Mr. DIWAN. My point is about the unintended consequences that Ed was talking about. If you reduce the market, you have other unintended consequences.

Finally, about the liquidity issue. I don't know if you have 71 percent of speculator here in the market, it means it is more liquid. I can say it is probably less liquid, because a lot of the players are coming only on one side of the market. Actually what you have here is a lack of liquidity. You have a lot of buyers. You don't have a lot of sellers. And the question is how do you rebalance that, how do you make these pension funds be willing to play both sides of the curve, not only one side?

So I don't think we're struggling through too much liquidity. I think we're struggling through too little liquidity.

Mr. STUPAK. Mr. Masters, Mr. Krapels, do you care to comment?

Mr. MASTERS. Sure. So the issue with pension funds trying to hedge, I mean that whole issue, I mean pension funds are capital markets investors, and they are looking at the commodity. They are trying to look at the commodity markets as a place for buying and holding. The whole concepts, buy and hold, long term, we're investors, don't apply to the commodity futures markets. These are capital market concepts. They're not commodity futures concepts.

Commodity futures expire, in some cases monthly. The reason they expire monthly is because they have a physical delivery functionality that allows physical delivery participants to theoretically take delivery. That's why they expire. So the way pension funds do this is they buy a futures contract, and then they sell when it gets ready to expire, and they exchange it for another contract. So effectively what it is is like a lay-away in the commodity futures markets. They never actually take delivery.

So there's other ways that they could hedge inflation, or there's other ways that they could make a bet against the dollar. But certainly if they're involved in the commodities futures markets, let's have them involved in a strategy. Give the money to a CTA, give the money to a CPO, but let's have them involved in a buying and selling strategy rather than a one-way, long-only allocation strategy. And if they do that, let's make sure that they and every other participant in the futures market abides by very strict position limits.

Mr. KRAPELS. I would only add that futures markets are incredibly valuable parts of our economy. We do not want the oil futures markets to go away. They need more than 20 percent speculation to survive. They need multiples of the physical markets trading to survive.

What we have here is a matter of degree. The markets in the last couple of years have just become excessively the home of the speculation that Mr. Masters has talked about. We do not want to regulate the futures market out of existence, we want to regulate it back to the point where it was in the 1990s, which was an excellent, excellent market for hedgers.

Mr. STUPAK. My time is up.

Mr. Whitfield for questions.

Mr. WHITFIELD. Thank you, Mr. Chairman.

I was reading a newsletter recently from a gentleman covering the European market regarding supply and demand, and he made the comment that he was predicting that all production would be going down between 3 and 4 and 5 million barrels a day. And then I noticed that T. Boone Pickens testified in the Senate a couple of days ago, and he was talking about he thinks the oil production has peaked, and that it will be going down around 8 percent in the years to come on a yearly basis. And, of course, you all have testified this morning that if we adopt some regulatory changes relating to speculating in the futures market in oil, that we can have a significant reduction relatively soon.

But overall we know that supply and demand is going to be the real answer and questions that we have to address. So I would ask you all, do you all agree with this peaking theory that I referred to; one, the fellow at the European Union saying he thinks it's going to be going down 4 to 5 million barrels a day, Boone Pickens saying 8 percent a year in production? Would you agree with that, Mr. Gheit?

Mr. GHEIT. One of the problems is that the higher oil prices, they provide no incentive whatsoever for oil-producing countries to open their resources.

Mr. WHITFIELD. You say the higher?

Mr. GHEIT. Higher oil prices do not help supply at all.

Mr. WHITFIELD. Why is that?

Mr. GHEIT. It's very simple: Because they have no incentive whatsoever to give access to the resources to oil companies. ExxonMobil is sitting on $45 billion in cash that is earning 3 percent. They are not—this is one of the smartest companies, but they have no access to resources, OK. Russia is kicking out BP. Every time you open the newspaper, you see Russia has another problem with BP. Why? Russia has no incentive to increase production. Since their budget was based on $25 oil 5 years ago, now it's $140, they have so much money, they don't know what to do with it.

Mr. WHITFIELD. And is Russia still the number one producer in the world of oil?

Mr. GHEIT. Excuse me?

Mr. WHITFIELD. Russia is the number one producer of oil in the world?

Mr. GHEIT. Yes. Russia is now the largest oil producer in the world.

Mr. WHITFIELD. What about the rest of you, do you have any thoughts on this peaking issue?

Mr. DIWAN. I agree with Fadel here, that the problem is access to resources. The problem is its capacity of production, it's not about peak oil. There's plenty of molecules on the ground, and every time the prices increase, we have more oil in the ground because it's an economic concept, it's not a physical concept. There's plenty of oil. At different prices we have more oil. If it's $300 oil, we'll find a lot more oil. It just costs more to go get.

So the issue here is really about capacity of production. This is an industry which has lived with low oil prices and, because of that, low returns on capital and has not invested over the last 20 years. And now we're in a situation which is a Catch-22. We do not have spare capacity, and it's unlikely that anybody will accept to build spare capacity just for the fun of it. We are asking producers to invest hundreds of billions of dollars to create a capacity that they will not choose to bring down the price of their own commodity. It's not going to happen.

Mr. WHITFIELD. What percent of the oil reserves are held by governments today?

Mr. DIWAN. The reserves that are held by government that we do not have access to are 77 percent in our latest calculation for oil.

Mr. WHITFIELD. Seventy-seven percent?

Mr. DIWAN. Yes.

Mr. WHITFIELD. Is there anyone else?

Dr. Krapels.

Mr. KRAPELS. I think the problem of accessing the resource space is the number 1 problem. It shows a supply in elasticity to price. You can let the price go up, but the supply does not follow. However, I don't take the next step, which is, I think, what Boone Pickens has done, and to argue that you're going to see an 8 percent decline in worldwide oil production per year. That is not the case. Every responsible oil-forecasting organization I know has oil production going up over the next few years, not going down. So it's just a question of supply and demand are tight, but supply isn't falling off the cliff.

Mr. WHITFIELD. Maybe he meant fields were going down, production fields were going down.

Mr. KRAPELS. Yes. In certain areas that's going to happen.

Mr. WHITFIELD. OK. Thank you very much.

Mr. STUPAK. Did you want to answer?

Mr. MASTERS. Sure. I was just going to make one point. One of the reasons that financial investors have had such an impact on the price of oil here is because of the supply inelasticity in the oil market. And so having that supply inelasticity in combination with an enormous amount of investment flows coming into that commodities futures market has led to an explosion in prices. And so that's the real issue you've got. You've got both things that have allowed prices to really move.

Mr. STUPAK. Mr. Inslee for questions.

Mr. INSLEE. Thank you.

We've talked about five actions closing three loopholes, including the Enron loophole, position limits, margin requirements. But some have argued that if we take what I consider fairly commonsense actions, that it would simply drive these dark markets offshore overseas. This would not solve the problem. What is the response to that? Why should the United States act even though we don't have total global hegemony over this regulatory climate?

Mr. KRAPELS. In my opinion, there are only two places in the world where you can trade oil in this way, and that's the United States and the U.K. If those two countries adopted similar policies, there's no other place they can go.

Mr. INSLEE. Why do you say that?

Mr. KRAPELS. Because the tradition of having liquid futures markets has not extended to other countries. People would not park billions of dollars in Dubai.

Mr. MASTERS. I would just make a comment. When people say that, I think it's an empty threat, and the reason that is is because the physical delivery functionality that our markets offer is very important. That helps anybody that's doing business in the United States, its transacting, and their trading partners stay in the United States. We are the largest producer of food in the world. We are the largest consumer of energy in the world. So physical producers want to use, and consumers want to use, delivery terminals potentially in our markets. And having the physical people in our markets allows for better price discovery. If you take away the physical folks, and you just operate an exchange overseas, like you can with financial futures, it's a much different proposition. In fact, it will be you just get a casino in the sky, and it doesn't have any real bearing on what the actual price of crude oil or other physical commodities should be.

Mr. INSLEE. You have all portrayed an incredibly dramatic picture; I mean, if we're talking about 30 or 50 percent reductions in the price of oil, the economic ramifications that are obviously stunning. And all of us understand what's on the table here.

I want to contrast that to if we have relatively small increases in domestic production. You've had parameters each of you have talked about somewhere in the 30 to 50 percent reduction price associated with excess speculation. If you had increased production, say, in the next 10 years, worldwide, of, say, 1 percent, which represents if everything optimistically was perfect drilling everywhere in the United States, from offshore to the Arctic to the National Mall and the South Lawn of the White House, you might get an increase of maybe 1 percent of increased crude production in the worldwide market. How would that, by contrast, decrease the price of oil? Is it anywhere close, I guess is the question, of 30 to 50 percent reductions we're looking at in dealing with excess speculation?

Mr. DIWAN. Well, the question is how much demand is growing. And I could suggest that if it's growing at 1 percent, probably demand would be growing at least at the same level. I mean, prices will equilibrate.

The issue here is really it's very important to understand that if you do not have spare capacity, you have a problem in this market, and this market basically is inherently bullish, because what you're creating is any problem happening anywhere in the world at any time means that you'll have less supply than what you expected. And every time you have less supply than what you expected, and no matter what your expectations are, it means that prices will go up.

Mr. KRAPELS. If I can put a different take on the question, and it's a very good one, is there anything that gives you more bang for the buck in the short term than what we're discussing today in terms of relief for consumers? And the answer is, no, I think this is the biggest bang for the buck in the short term. It's where we have misgoverned our own commodity markets, and that's why I use the Pogo quote. Long term, though, we absolutely have to do things to reduce demand and to increase supply, and I think everybody understands that, but you do that at an $80 price level and not at $150 price level.

Mr. INSLEE. And by the way, I think if we really wanted to increase supply, we need alternatives to oil. We haven't talked about that much today. We've talked about a few more holes in the ground. But if you really want to decrease the demand for oil, provide Americans an electrified transportation system. Use the A123 battery company to drive our cars electrically. Use the Sapphire Energy Company which has found a way to develop ATSM-certified gasoline from algae.

If you really want to decrease the price of oil, get an alternative to oil. And I can report to you that's going to happen here because the U.S. Government ultimately is going to drive those innovations. We're going to start work on that shortly. Thank you.

Mr. STUPAK. Thank you, Mr. Inslee.

Mr. Barton for questions.

Mr. BARTON. Thank you, Mr. Chairman. I've got some questions, but I also have some comments.

I have listened as we have talked about this issue, and I have to respond a little bit to what my good friend from Washington State just said. I could hypothesize that we could produce 1 million barrels a day out of Alaska that we're not doing, a half a million barrels a day off the coast of California that we're not doing, 1 million barrels a day out of the eastern Gulf of Mexico that we're not doing, probably another million to 2 million barrels a day off the Atlantic coast where we haven't even looked, 2 million barrels a day in shale oil that we're not developing, and 1 million to 2 million barrels a day to from coal-to-liquids that we're not doing.

Now, if we were doing that right now, we would double the domestic oil production equivalent in the United States of America, and, given the tightness of the world oil markets, we would have a much different supply and demand.

Now, we're not doing it, we're not doing it. I'm on a bill with Chairman Dingell on oil speculation. I'm on an independent Republican bill that the CFTC has basically implemented since we introduced it. I think speculation is a problem. And I agree with what Dr. Krapels said that in the short term it's the easiest thing to do, although it's not easy, but it is easier than physically going into the field and developing some of our domestic resource space.

But to say that the only answer is purely to make it much more difficult to play in the futures market in the commodities, or specifically oil, is disingenuous because the futures market track reality in the world, and the reality in the world is we have a tightness in the demand-supply situation that speculators are taking advantage of, because, as one of you gentlemen just said, if you're watching the value of the dollar decline 1 percent a month or 2 percent a month, you can't put a lot of money in the stock market. You go into something that has the ability to be a hedge against inflation and the decline in the value of the dollar. And if there are no limits in the futures market, it's a rational decision for these hedge funds and these other funds to put a lot of money into the futures market. It's rational. People are rational with money.

Now, my question is, can we physically—in the U.S. market can we discriminate between a physical player who is either selling a real barrel or buying a real barrel and a nonphysical player? Can you in an open society have different rules based on why people are in the market? Is that possible? Anybody?

Mr. GHEIT. Yes, it's possible, because they have different goals and objectives. A physical hedger, what you want to manage again is the commodity risk. They are in the business not to make money, they are in the business not to lose money. But the financial players are in the business for one thing only, and that's to make a lot of money in a short spurt of time.

Mr. BARTON. But everybody on the panel agrees that we can have different rules for different types of potential investors in the futures market.

Mr. KRAPELS. And we've done so for decades.

Mr. MASTERS. That's always been the case.

Mr. BARTON. OK. Now, do you agree or disagree on the suggestion that we could require a higher margin for a nonphysical investor in the futures market? Do you all agree with that?

Mr. KRAPELS. Yes.

Mr. DIWAN. Yes.

Mr. GHEIT. Yes.

Mr. BARTON. Now, to go to the question that Mr. Inslee raised, I have been in reasonably close contact with the makers of the U.S. market in Chicago and in New York, more in New York than in Chicago. I'm told that if we tighten up, require more transparency, higher margins, position limits, eliminate exemptions, that a large number of the so-called speculators, the paper barrel people or the video barrel people, are just going to go to the ICE market or some other market.

Now, two of you gentlemen seem to indicate they won't go there because they don't have the—those markets may not have the financial stability. But I think when the New York Merc guy testifies later, he'll show you that the ICE market has grown almost exponentially as compared to the New York market.

So how can we regulate in the United States in a way that does some of the good things we want to do and have that roll over into the ICE market, in the Dubai market, and maybe even the Hong Kong market for that matter? How do we do that?

Mr. GHEIT. The two markets account for almost 90 percent of the trade. If we control both markets, we basically control 90 percent of the whole market.

Mr. BARTON. Under the current system. But if we change the market condition in the United States, what's to say that we won't——

Mr. GHEIT. It has to be simultaneous. We change the rules in the U.S., and simultaneously we'll have to require a rule change on the ICE market. Or we can—as I said before in my recommendation is that any company doing business in the U.S. must play by the U.S. rules, period, whether it's on the ICE or in the NYMEX.

Mr. DIWAN. I think you need to regulate those two markets, and that takes care of that.

There is a third market which is important, which is the over-the-counter market, which is a gray market that we don't know much about.

Mr. BARTON. We sit here in Washington and we think whatever we do rules the world, but we have a global—we certainly have a global market in oil. And I'm still not sure how we—if we do what we think is the right thing, how we get the rest of the world to follow suit? How do we get the British Parliament to put the same rules in place for the ICE exchange that while it's physically in Atlanta, it's based in London? And how do we make sure that Dubai or Kuwait or wherever don't create their own market because they can have lower margins and less transparency?

Mr. DIWAN. I think most of the financial players will only put money in a market which is regulated, stable, that you know what's happening. So I don't imagine that the liquidity would move offshore. I believe you actually do have to regulate those both exchanges in the same way, and then you close most of the issues here on the future exchange.

The way I look at the oil market, it's like a huge iceberg, and we see only the tip, which is the future market. But there is also what's happening below the water level, which is the over-the-counter market that I don't think you can do much about, or at least I do not know how you would go about it.

Mr. BARTON. But everybody agrees that we can some way require comparability or conformity with the U.S. market regulations; that it's legally, constitutionally, realistically possible?

Mr. MASTERS. Currently any futures contract that calls for delivery inside the United States, we're the largest consumer of energy in the world, is automatically subject to CFTC regulation. Any futures contract that cash settles against a U.S. contract with physical delivery provisions is also automatically subject to CFTC regulation unless specifically exempted. If not exempted, then no person inside the United States may lawfully trade that contract. So I don't think that there's anywhere in the world that wants to lose U.S. speculators or U.S. physical players.

The 60 percent of the volume on the cash-settled WTI crude-oil contracts on the International Continental Exchange, the ICE, is traded by U.S. entities. If the CFTC had not exempted the ICE from regulation, then those U.S. entities would not be able to trade that contract, and it would have been very difficult for that contract to ever get off the ground.

Mr. BARTON. Mr. Chairman, can I ask one more question? I know my time is expired.

Mr. STUPAK. You bet you.

Mr. BARTON. If we were to set a different margin requirement by law or by regulation in the U.S. market for nonphysical traders in the oil futures market, what's a ballpark figure on what that is? Because it's not an equity market like Mr. Masters has pointed out. This is an option to purchase or sell at a given price at a given time. So instead of 5 percent or 3 percent like it is today, what would that be? Do you want it to be as high as 50 percent, or do you want it to be 10 percent, 25 percent? Just a general ballpark figure for nonphysical players in the oil futures market in the United States.

Mr. GHEIT. I go for the whole thing. I go for 50 percent.

Mr. BARTON. Fifty percent. The same as stocks then.

Mr. KRAPELS. I would get to a lower number more slowly. I would gradually increase the margins over a period of time and maybe get to a one-third requirement.

Mr. BARTON. Thirty-three percent.

Anybody else? Does anybody vote to keep it the same? You all think it needs to go up?

OK. Thank you, Mr. Chairman.

Mr. STUPAK. Thank you, Mr. Barton.

Mr. Melancon for questions.

Mr. MELANCON. Thank you, Mr. Chairman.

I just recently visited on a congressional trip with all oil ministers in the Middle East. And, of course, we were at first kind of taken aback when they said they would much rather see the price between $70 and $80 than where it is now. I grew up in the sugar industry, and my dad always said the only people that make money when sugar moves up or down are the brokers because there's a reason to sell, and I guess that's what we're dealing here.

One of the things, Mr. Diwan, I was looking at, on your chart that you gave us with oil prices and structural trends, it showed that the price started moving up around January of '04, got up to about $80 apparently in the early part of '06, and then dropped out and then took off. Is there a point in here that you can point to that the CFTC quit regulating the ability of the people to hedge?

Mr. DIWAN. Not that I know of.

Mr. MELANCON. Is there someone?

Mr. DIWAN. I think the price movement is explained more by the physical here.

Mr. KRAPELS. Do you mean in the last quadrant of the one that——

Mr. MELANCON. Yes. Looking at the graph that was there, we had movement upward, then we had a spike down, and then it took off.

Mr. DIWAN. The spike down was really because oil stocks were building very fast. And after that oil, basically OPEC cut some production to reduce supply to tighten stocks a little bit. This is what happened in 2006 when we saw prices declining to $52.

Mr. KRAPELS. We saw it mostly as an increase in the positions of funds, frankly, that there was just a large increase in those funds' positions that drove the price up to the last $135.

Mr. MELANCON. And I guess that's what I was trying to find out is if that is a direct correlation. And that's why I was asking about the date when the exceptions were being made by the CFTC.

Mr. KRAPELS. It's very hard to track that precisely.

Mr. MELANCON. When did ICE open up its doors and start trading here?

Mr. KRAPELS. 2000.

Mr. MELANCON. 2000.

Mr. KRAPELS. I think ICE started in 2000, and really took off after the Enron collapse.

Mr. MELANCON. And the Enron collapse was about——

Mr. KRAPELS. About 2002.

Mr. MELANCON. 2002. Yes, that's about when the margins started actually. It looks like it really started moving on a steady climb around January of '04, a little bit before January, maybe midyear of '03.

Do any of you all have the price for gasoline or fuels by countries or regions? I have people back home, of course they think they're the only ones impacted. And I pick up bits and pieces on the news. In Saudi Arabia, obviously they subsidize, Dubai, Abu Dhabi, the UAE. But in places in Europe and South America or wherever, do we know what the price is?

Mr. GHEIT. The Europeans are paying exactly double what we're paying. China is paying probably more than half what we're paying. The difference between what we pay and what the Europeans are paying are basically government taxes on fields in Europe. The difference between what we're paying and what the Chinese are paying are basically government subsidies. So it is government policies that really influence the price. Now, the over-the-counters, obviously they are totally subsidized. Their gasoline is cheaper than water, so they don't really come into the picture at all.

Mr. MELANCON. One of the questions that's always been out there, and I heard some—I think Mr. Barton had talked about if we were producing in all our offshore areas, we could probably be producing the additional millions of barrels of oil that we need. If in fact that did happen, what happens to us with the capacity to refine and process jet fuel, diesel fuel, gasoline? Do we still get mired? Do we have enough capacity to move it into fuels, or do we have some inverse action on the market?

Mr. GHEIT. It would definitely have an impact. Increased supply definitely will cool off prices. The prices will come down. Two ways: we can increase supply or reduce demand, or better, we could do both, and they will have the same impact. Prices will have to go lower.

Mr. MELANCON. Worldwide what's the capacity of refining?

Mr. GHEIT. Refining, about 80 million barrels.

Mr. MELANCON. And what's the daily production of oil?

Mr. GHEIT. Production is about 85 million.

Mr. MELANCON. So it produces about 5 million barrels a day more than we're processing for usage. And the reserves are about how much a percent of total?

Mr. GHEIT. The reserve?

Mr. MELANCON. Yes. Worldwide, do you know what the reserves, oil reserves, are?

Mr. GHEIT. Oil reserves are 1.4 trillion barrels.

Mr. MELANCON. No, excuse me, I didn't mean what's left in the ground or estimated. What do we have that's in excess of what's out there going through the process?

Mr. GHEIT. Basically most of the excess is in Russia, the Middle East and basically OPEC countries. And the numbers flow between 2 to 3 million barrels a day.

Mr. MELANCON. Thank you, Mr. Chairman.

Thank you, gentlemen.

Mr. STUPAK. Thank you.

Mr. Walden for questions, please.

Mr. WALDEN. Thank you, Mr. Chairman.

Are the processed reserves, I guess that which has been extracted from the ground and in the pipeline, if you will, or in storage, are they going up or going down for gasoline, for oil, for natural gas?

Mr. DIWAN. The short-term stock changes as the product are increasing, but the crude is decreasing.

Mr. WALDEN. So if the processed product is increasing, then you would think that—is it increasing at a rate that keeps pace with demand, or is the rate of demand outstripping the rate of increase in the processed product?

Mr. DIWAN. The processed product in the United States, the average inventories are above their 5-year average. So we have a little bit more stock than we usually do at this time of the year. However, this market, the price discovery of this market is really crude led, it's not product led.

Mr. WALDEN. Now, I think you indicated, and correct me if I got this wrong, that $35 of the price of a barrel of crude could be tagged the incoming money of the nonphysical traders? Is that what you all said or somebody said?

Mr. GHEIT. I would say more.

Mr. WALDEN. More?

Mr. GHEIT. Much more than that.

Mr. WALDEN. How much?

Mr. GHEIT. I would say the decline in the dollar probably had between $10 and $15 in the price spike, and everything above $65, the difference between that and the current price is pure speculation.

Mr. WALDEN. So $10 to $15 is the price of the dollar, value of the dollar?

Mr. GHEIT. $10 to $15 tied to the currency. And the difference between $65 and $130 or $125 would be basically speculation.

Mr. WALDEN. And do each of you agree with that analysis?

Mr. KRAPELS. I think we each have our own thoughts on it. Fadel is probably at the low end of the range of—at the high end of the range in terms of the speculative impact. I had guessed somewhere in the 30s or 40s.

Mr. WALDEN. Mr. Masters, do you have any?

Mr. MASTERS. I think the answer is that nobody really knows. When I talk to refiners, that's what they tell me is that the price should be in the neighborhood of $65, $70.

Mr. WALDEN. OK. There have been some rather senior members around this institution who have—individuals that have called for nationalizing our refinery system. Do any of you think that's a good way to—for the market or to reduce costs?

Mr. GHEIT. A very bad idea.

Mr. WALDEN. Mr. Diwan?

Mr. DIWAN. I don't think we have a particular problem in refining right now.

Mr. WALDEN. Mr. Masters.

Mr. MASTERS. The interesting—I don't agree at all.

Mr. WALDEN. OK. Neither do I.

Mr. MASTERS. I would make one point. One of the interesting things that's happening with refineries is that on the one hand they've got, as I said, demand and demand. They have investor demand helping to drive up their input cost, which is what they have to buy crude oil. And on the other hand they're trying to sell gasoline, which is driven by consumer demand, which in the U.S. has gone down in price. So it's hard for them to go out and build new refineries when they've got a situation in which crack spreads are going down. It's in part because of investor activities.

Mr. WHITFIELD. Mr. Krapels.

Mr. KRAPELS. Refiners are not the problem. Trying to build a refinery in the United States today is practically impossible. So nationalizing it will only make that worse.

Mr. WHITFIELD. All right. I'm glad to hear you all say that. I concur, but you are the experts here.

There are some Members around this body that think that's the way to go. Everybody is trying to find an answer here. So if we were to move forward and require some sort of limitation on how much you can—nonphysical traders can—do and some more transparency, A, how long do you think that would have to be in effect before we saw a real change in the price of crude oil, and so, how much and how long?

Mr. GHEIT. Well, if we assume that speculation is playing a major role in the jump in oil prices, these people can switch their position very quickly from long to short, but other members of the panel said you might take a longer time. But the market would be very efficient very quickly, and it will come to an equilibrium where prices will go a lot faster than many people think. People are not going to wait to lose money; they will bail out as soon as possible.

Cut your losses and bail out. And that's exactly what the market is going to do.

Mr. WHITFIELD. Sort of like what is happening in the housing market?

Mr. GHEIT. I would say 30 to 60 days we will probably see an immediate impact.

Mr. DIWAN. Well, if you change your regulation, and the expectation is that you are going to have to change your behavior, you have an interest to do it as quickly as possible before everybody else. And probably they are doing it already, but that's the idea. But then you can allow more time to adjust if need be. But I think the bigger impact will be quite immediate.

Mr. WHITFIELD. OK.

Mr. Masters.

Mr. MASTERS. Just to Roger's point, one of the interesting things I saw last week where commodity prices have come down, and on the wire some people had said that was because of the threat of potential congressional legislation. So when the news wires were saying people were already reacting to that, I think that's a pretty powerful statement.

Mr. KRAPELS. I agree. While I would like people to give time to make these important adjustments, my guess is that there will be quite a stampede to liquidate positions quickly.

Mr. WHITFIELD. OK. So if we did that piece, more transparency, different positioning requirements, and all, and if we passed legislation saying we're going to allow access to domestic supplies onshore and offshore, which do you think would have the most value in the marketplace to consumers?

I realize one would be very quick, one would be long term, but both would send signals to a market that's a little dysfunctional right now, correct?

Mr. Gheit.

Mr. GHEIT. Both are needed, but one is immediate and one longer term. But both are needed. There is no one better than the other.

Mr. WHITFIELD. All right.

Mr. GHEIT. They are both needed, and we should start them now.

Mr. WHITFIELD. So one better than the other, both are needed, one has an immediate impact, one has sort of a long——

Mr. GHEIT. In terms of energy security the latter is much more important.

Mr. WHITFIELD. OK.

Mr. Diwan, do you agree with that?

Mr. DIWAN. No. I don't know anybody who would buy or sell oil today, because we will have a new supply in 7 years on the market. I think they will wait to see what happens and they will see what happens to demand and the supply in the rest of the world, et cetera. I don't think that people will signal buy or sell on that—on that change.

Mr. WHITFIELD. Mr. Masters.

Mr. MASTERS. I would just go back to my example of the person losing weight. We have a chronic issue, which is energy security, that can be solved with legislation. We've also got an acute issue where we have a patient that's dying. We need to save the patient first, so——

Mr. WHITFIELD. So maybe not a crash diet, but a long-term rebalancing of what we do?

Mr. MASTERS. I think in this case that we're trying to save the patient first.

Mr. WHITFIELD. Right.

Mr. MASTERS. I think that we want to use the quickest means available to help save the patient. Then we can deal with the longer-term issue of diet and exercise.

Mr. WHITFIELD. Right. So crash diet for immediate weight loss, change of—yes, Doctor?

Mr. KRAPELS. I would hate to see the two actions linked. I think it would be nice to do them separately, because I think the first one, the one we're talking about here today, is actually fairly easy to do. I think releasing reserves for future production is a much more contentious and difficult issue.

Mr. WHITFIELD. Contentious or not, is it the right thing to do for the country's energy security and for the price for consumers in America?

Mr. KRAPELS. It is. If you can get the legislation passed, that would be great.

Mr. WHITFIELD. Thank you.

Mr. STUPAK. Mr. Green, questions?

Mr. GREEN. Thank you, Mr. Chairman, and I appreciate the second round.

Mr. Gheit, your testimony calls for setting volume limits for commercial traders such as oil companies or refiners, that are related to their physical needs. Would you explain the purpose of this recommendation, because it seems like that is not the problem that this morning's talked about?

Mr. GHEIT. No, basically this was the basis for setting trading limits for the noncommercial.

What I am saying, let's start with the physical traders first, the people who are going to own a barrel of oil, whether it is going to be an airline or refinery companies or whatever, and then set what is needed for the financial market in terms of volume.

So the basis should be the physical market, and then we should study, we should examine how much more liquidity is needed to be provided by the financial market. And based on that—I don't want to put any trading limits before I know exactly what that oil industry need, what the airline industry need, what the chemical industry need—then of the collective volume, if you will, we set the volume of their financial market.

Mr. GREEN. In this next two questions for everyone and—one of them is, on June 6th there was an $11 increase in the crude oil price. In terms of the fundamental factors of supply and demand, how do you explain that and what explanation for that kind of movement is there, for that $11 on that 1 day?

Mr. DIWAN. I think there were two events that day that were important. One was the discussion by the head of the European Central Bank to increase interest rates, so it has an immediate impact to lower the value of the dollar, increase the value of the Euro. So you had a lot of people who were selling, actually, oil because they felt the fundamentals were weak, who were cut short and had to cover.

The other was the comment by an Israeli minister saying that an attack against Iran is unavoidable. And these two events have pushed oil prices much higher.

Mr. KRAPELS. If we live in a world where an obscure statement by an Israeli politician can make the price of a vital commodity like oil go up by $11, then we're in deep trouble, and we need to do something about it.

Mr. MASTERS. I don't think there was any case that was driven by speculation.

Mr. GREEN. Well, let me give you an example. And I know yesterday Saudi Arabia had producing nations there and our Secretary was there. About 2 weeks ago Saudi Arabia mentioned that they were at an increased production of about 200,000 barrels.

And about a week ago there was a rig off the coast of Louisiana that BP had called the Thunder Horse, that had been hurt during Katrina and had to be hauled in. And it is actually producing 250,000 barrels a day, and that had no impact at all on the market.

Mr. DIWAN. We have been waiting for Thunder Horse for 3 years or 4 years, so it has been in the news for 4 years.

Mr. GREEN. Well, it is producing now, but wait until another hurricane. I guess that's the concern. Because, like you said, somebody can—an Israeli air official can say something.

Some of us are so frustrated. We have almost 700 million barrels in the SPR. Some have said well, what if the President mentioned that we're going to start releasing, without a timetable, from the SPR. That would impact. And without a timetable, though, it could be tomorrow, it could be next week. What would that do to the speculators?

Mr. GHEIT. It would definitely cool off speculation. I cannot quantify it, but it is definitely going to cool off speculation.

History has shown that when President Bush did it in the Gulf War, it had an immediate impact. When President Clinton—had an immediate impact. It is a psychological impact on the market. Remember, it is a market that runs on speculation and expectation, not the physical, not the physical.

For example, Petrogas made a discovery offshore Brazil, and all of a sudden oil prices dropped. Why? This field, if developed, will take 5 years before we will see a drop of oil on the market. But guess what, the market cooled off immediately.

It is a knee-jerk reaction to something that is going to happen years from now. It is not physical market; it is all expectation.

Mr. DIWAN. If I can answer that, I can have exactly the converse scenario, which means if this President releases oil from the SPR right now, the market will believe that we are going to be attacking Iran later on, and oil prices will increase immediately.

OK, so if you release oil by this President, without any reason, from the SPR, I can assure you oil prices will jump up.

Mr. GHEIT. Just in this market it moves up, good news or bad news. When rebels kidnap oil workers in Nigeria, oil prices go up.

Mr. GREEN. Frankly, Congressman Melancon has constituents that are getting kidnapped in Nigeria in the offshore rigs.

But—I understand it is volatile, but that was just some discussion from folks who actually come from the oil patch who said, what would we do if just the President made this determination that, OK, over the next months we are going to start releasing it; we're not going to tell you when. But what would happen? And I would hope it wouldn't signify that we're preparing to attack anybody.

Thank you, Mr. Chairman.

Mr. STUPAK. Thank you, Mr. Green.

Mr. Burgess for questions, please.

Mr. BURGESS. Thank you, Mr. Chairman.

Mr. Masters, I want to thank you and commend you for putting many of the arguments in terms of medical terminology. It makes it much easier for me to understand the tumor versus the bubble: excise the tumor, treat the underlying obesity, but you have to take care of the heart attack now.

On the issue of the longer term, the supply-demand, I think, Mr. Gheit, you mentioned it as well. Is it fair to say that market fundamentals include facts not just about our current supply, but expectations of future supply and demand? I think you referenced that as far as the Brazil field was concerned.

Mr. GHEIT. Yes.

Mr. BURGESS. Did we—I say "we" in the sense of the United States Congress, House of Representatives—invite speculation by failing to take measures that would result in increased domestic supply?

Mr. GHEIT. Yes.

Mr. BURGESS. And again, this needs to be a two-pronged approach, that of the position limit for the immediate effect, the immediate beneficial effect it would have, as well as all of the other methods that have been outlined as far as increasing domestic production. Is that correct?

Mr. GHEIT. Yes.

Mr. BURGESS. And is there any reason to proceed with only the position limits currently and ignore the increased supply activities that we'd know we will surely have to undertake within 8 to 10 years' time?

Mr. GHEIT. No, that is not going to get the results that we are hoping for. It has to be full court press. It has to be a combined near-term and long-term strategy. We just cannot stop and go. It has to be a long-term strategy that will be implemented over a long period of time.

But immediately we have to do what's possible to burst this bubble.

Mr. BURGESS. Well—and I appreciate your saying that because I firmly believe that an all-hands-on-deck philosophy is really what—what is required here. And so often we seem to be fighting ourselves up here. This has been a refreshing exchange this morning, or this afternoon, and I really appreciate everyone's participation.

You know there is another committee that meets just across the hall that tends to be perhaps a little more flamboyant in attracting the press coverage, and they brought in all the oil company executives. Is it safe to say that we've moved beyond the point where we vilify the oil company executives?

Mr. GHEIT. I've been in this business almost 30 years, and I can tell you, the oil companies get blamed for something that they have absolutely no control over. They are price takers. They don't have any—it's not a brand name; they are basically in the market every day whether oil prices are $10 or oil prices are $140. Yes, $140 or $130 oil creates this huge profit, and everybody is blaming the oil companies for creating this bubble, or the run-up in oil prices.

But the fact of the matter is, believe it or not, the stocks of the large, integrated oil companies have been down for the year despite $140 oil. So shareholders of the large, integrated companies are not happy at all with $140 oil.

Mr. BURGESS. Well, does anybody on the panel disagree with that philosophically?

Is there anyone on the panel who believes that creating a situation where we tax our domestic oil companies to a greater degree will result in more energy being available at a lower price to the consumer? Can anyone envision a scenario where that would work?

We hear discussion of legislation that is going to be before this Congress before the end of year where we will increase the taxes on our domestic oil producers, the idea being that we will now be able—by doing that, we will be able to lower the price to the consumer and increase the amount of supply.

Does anybody believe in a rational world that that will work?

Mr. GHEIT. That's totally, totally irrational.

Mr. BURGESS. OK. Well, I appreciate your candor.

And, Mr. Chairman, we'll revisit that again at the appropriate time. It has been a long morning. In the interest of time, I'm going to yield back the balance of my time.

Mr. STUPAK. I thank the gentleman.

Mr. Dingell for questions.

Mr. DINGELL. No, Mr. Chairman. I thank you for your courtesy.

Mr. STUPAK. Thank you, Mr. Chairman.

Well, that concludes all questions of this panel and I want to thank each of you for coming on a very important testimony and it certainly has helped us out quite a bit. Thank you.

Mr. BURGESS. Mr. Chairman, if I may, if there are questions that come up as a result——

Mr. STUPAK. Put it in writing.

Mr. BURGESS. OK, thank you.

Mr. STUPAK. And as always, we'll submit them in writing if someone has further questions. We usually keep the record open for 30 days after a hearing to allow opportunity.

I thank you all for your expertise. Thank you.

Mr. STUPAK. I will call our second panel of witnesses to come forward.

On our second panel we have Mr. Doug Steenland, who is President and CEO of Northwest Airlines; Mr. Eugene Guilford, Jr., who is the Executive Director and CEO of the Independent Connecticut Petroleum Association; and for our third introduction, I will yield to my friend, Congressman Mike Ross of Arkansas, to introduce Mr. Williams.

Mr. Ross, would you like to introduce Mr. Williams, please.

Mr. ROSS. Again, Mr. Chairman, thank you. I'm a member of the full committee, not this subcommittee, and I appreciate your selecting an Arkansan as one of our witnesses today. And if my projections are correct—I'm on the Energy and the Health Subcommittees, and I think sometime around 2029, I will get to chair one of those, and I will certainly return the favor to you at that time.

I would like to thank my fellow Arkansan, Mr. Steve Williams, for coming before the Committee to testify today about his extensive experiences with rising diesel prices. Mr. Williams is the Chairman and CEO of Maverick USA, which operates the second largest company-owned flatbed truck fleet in the United States. In addition, he has served as both the Chairman of the Arkansas Trucking Association and the American Trucking Association. Steve is also on the Executive Committee of the American Transportation Research Institute and the Transportation Research Board of the National Academies of Science.

Mr. Chairman, I think it is important that we have Steve on the panel today, because we have trucking businesses that are going out of business because of these high diesel prices; and we also all know that it directly relates to the recession we're in, because we're all paying more for products. Because if you think about it, just about everything you buy ends up on the shelf by way of a truck that's typically running on diesel.

So, Mr. Chairman, thank you for your interest in this issue. Thank you for this hearing today. And thank you for including an Arkansan that has nationwide experience in the trucking industry as part of this panel. I look forward to Steve's and everyone else's testimony.

Mr. STUPAK. Thank you, Mr. Ross. And if you're going to be subcommittee chair in 2029, I think you'll have to take that up with Mr. Dingell; he will still be running the Committee then.

It is the policy of this subcommittee to take all testimony under oath. Please be advised that witnesses have the right under the

Rules of the House be advised by counsel during their testimony. Do any of you wish to be advised by counsel?

The witnesses are indicating that they do not. Therefore, I ask you to please rise and raise your right hand and take the oath.

[Witnesses sworn.]

Mr. STUPAK. Let the record reflect that the witnesses replied in the affirmative. You are now under oath.

Mr. Steenland, we'll start with you, please, for an opening statement. We have 5 minutes set aside; if you have a longer statement, it will be submitted for inclusion in the hearing record.

Mr. Steenland.

STATEMENT OF DOUG STEENLAND, PRESIDENT AND CEO, NORTHWEST AIRLINES

Mr. STEENLAND. Thank you, Chairman Stupak, Chairman Dingell, Ranking Member Barton. Thank you very much for the opportunity to appear here today. I do so wearing two hats, one as Chairman of the Air Transportation Association, the trade association of U.S. airlines, the other is as the President and CEO of Northwest.

Having listened to the experts on the original panel, that was a very thoughtful discussion. As an industry we support their recommendations, and we would urge the Congress to adopt them expeditiously. Rather than to repeat what they've just gone through, I think it would be more helpful from the committee's perspective to focus on the real impact that this incredible increase in the price of oil has had on the airline industry.

Specifically, oil is now 40 percent of the total cost of the airline industry. For U.S. carriers from 2007 to 2008 the oil bill has gone from $41 billion per year to $61 billion per year, a $20 billion increase. For Northwest alone, in 1 year our fuel costs have gone up by $2 billion. The U.S. airline industry this year is forecasting a loss well in excess of $10 billion.

In this instance, the challenge is not so much—is as much the speed with which the increase has occurred as the magnitude. If you look back over the years from 2005 to 2007, oil went from approximately $26 a barrel to $72 a barrel. While those price increases were difficult, given the time period over which they occurred, they were, by and large, manageable. In 2007, with oil in the $70 range, the airline industry was profitable, and we would love if 2008 came even close to looking like 2007 was like.

However, when the price of oil over the course of 10 months goes up $70 a barrel and every dollar, in Northwest's instance, costs us $42 million a year of additional costs. When oil goes up almost $11 in 1 day, when you have volatility in any given day of, well in excess of $3, you are really living in an entirely different world.

The consequences of this are dramatic. So far this year, eight airlines have shut down, two have filed for Chapter 11, and all of the major network carriers are in the process of significantly shrinking their capacity. In Northwest's case, we will be between 8.5 and 9.5 percent smaller in the fourth quarter of this year than where we were last year. Other airlines are shrinking in similar magnitude.

Why is this happening? It is happening because we have no choice but to take these price increases and pass them through to our customers.

We've been through significant restructurings. In Northwest's case, we have taken $2.5 billion a year out of our cost structure and through increasing our revenue; so, therefore, we need to pass these prices through. As they get passed through, the consumer is going to be traveling less, because as prices go up, just like with anything in society, demand will go down. And when demand comes down, we need to adjust the supply to reflect what that demand is.

So, unfortunately, communities will lose service, the level of service will go down, inconvenience will increase, and adjustments in employment will have to take place. And given the impact, the incredible impact of air service on the economy, that is then going to ripple through and have a correlative effect on other businesses and other things that we do.

For those reasons, we would urge that the Congress act quickly, agree on a bipartisan measure that can address the issues that got raised by the panel this morning. And we would hope that we would be able to see legislation passed by the Congress by the August recess.

Thank you very much.

Mr. STUPAK. Thank you.

[The prepared statement of Mr. Steenland follows:]

STATEMENT OF
DOUGLAS M. STEENLAND
PRESIDENT AND CEO, NORTHWEST AIRLINES
ON
ENERGY SPECULATION: IS GREATER REGULATION NECESSARY TO STOP PRICE MANIPULATION

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON ENERGY AND COMMERCE
U.S. HOUSE OF REPRESENTATIVES
JUNE 23, 2008

Thank you for the opportunity to appear before you today. As Chairman of the Board of Directors of the Air Transport Association and President and CEO of Northwest Airlines, I am here to discuss our concerns about the impact of speculation in the energy futures markets. We are also concerned about the supply of oil and the impact of the weakening dollar, but today's hearing is to address speculation and whether more regulation is necessary. The ATA carriers firmly believe additional regulation is necessary.

Northwest, like other ATA member airlines, is an experienced participant in the energy futures markets and we recognize the value of rational and efficient energy futures markets in managing our business. When functioning properly, they play an important role in price discovery and managing physical supply and financial risk.

I cannot overstate the importance to my company and the entire U.S. airline industry of immediate Congressional action to halt excessive speculation in oil futures markets. Fuel is now approaching 40 percent of our operating costs, and growing. In 2008, U.S. airlines are forecast to spend $61.2 billion on jet fuel, $20 billion more than in 2007, and are projected to incur losses totaling close to $10 billion. If the current pricing dynamic does not change, our industry will be severely challenged and will continue shrinking – to the detriment of customers and the communities we serve. It is as simple and stark as that.

The financial health and security of the United States depends, in part, on a commodities market structure that is stable, rational and predictable. Today's energy commodities markets, however, do not display these characteristics.

The policy provisions of the Commodities Exchange Act ("CEA") speak in terms of the public interest in deterring and preventing price manipulation or any other disruption to market integrity, ensuring the financial integrity of commodities transactions and avoiding systemic risk in commodities markets. More specifically, Section 6a of the CEA states that "sudden or unreasonable fluctuations or unwarranted changes in…price of [a] commodity is an undue and unnecessary burden on interstate commerce." These established policies are a beacon for much needed reform.

Unfortunately, the U.S. airline industry has become the poster child for why reform is needed. The price of jet fuel, which as you know is tied to the price of oil, is out of control.

From 2002 through 2007, the annual average price of oil increased from $26 per barrel to $72 a barrel, an average annual increase of about $10 per barrel. While this was not insignificant from the airlines' point of view -- a $10 increase in the price of oil adds about $420M to Northwest's annual costs, for example – airlines were able to adjust to the increase given the time span during which these increases took place.

In the past 12 months, however, the price of oil has more than doubled – it has increased about $70 a barrel. There is nothing that airlines can do to fully absorb this increase. Both the magnitude of the increase and the speed at which it has occurred are unprecedented. In a few short months the cost of jet fuel has turned industry profits into enormous losses and is adversely affecting the industry's liquidity.

In 2004, oil started the year at $32.51 and ended the year at $43.36, an increase for the year of $10.85. Daily volatility was generally under $1.00. On June 6, 2008, the price of oil rose $10.58 in a single day, and daily volatility of $3.00 or more has become the norm with no correlative changes in supply or demand. We believe this increase in volatility reflects the increase in speculation and the degree to which it is affecting oil prices.

The consequence of the meteoric rise in oil and jet fuel prices is self-evident. Since Christmas, eight airlines – Aloha, MAXjet, Big Sky, ATA, Champion, Air Midwest, Eos and Skybus – have shut down. Frontier Airlines has been operating under Chapter 11 since April and Gemini Air Cargo just filed for Chapter 11 protection for the second time in two years.

All six network carriers have announced significant capacity cuts and service reductions, as well as difficult headcount reductions, to take effect after the summer travel season. American Airlines intends to reduce fourth quarter domestic capacity 11-12 percent, retire 75 mainline and regional aircraft and may eliminate thousands of jobs. United Airlines said it will ground at least 100 airplanes and is looking at shrinking staff. Delta is reducing domestic capacity by 13 percent in the second half of 2008, eliminating 4000 positions and shedding aircraft. Continental

Airlines announced that it would reduce fourth quarter domestic mainline capacity by 11 percent, will eliminate 44 routes and cut 3000 jobs. US Airways will shrink domestic capacity in the fourth quarter by 6-8 percent. Northwest plans to reduce fourth quarter capacity by 8.5 percent to 9.5 percent.

Further bankruptcies, liquidations, capacity adjustments and layoffs are to be expected if these oil prices continue.

Supply and demand fundamentals alone do not explain the price increases and volatility experienced in the energy markets. While the worldwide daily demand for oil has been growing by about a million barrels every year since 2004, this does not explain an increase in oil prices of over 100 percent during the last 12 months. Demand increased about 2 percent during that period.

In March of this year, about 1.2 billion barrels of oil were traded on average every day on the NYMEX and the London Intercontinental Exchange. World consumption is only about 87 million barrels a day. This means that the volume of paper transactions every day is more than 13 times larger than the actual amount of oil used worldwide in a day.

What has caused this disconnect between prices and supply and demand fundamentals? According to numerous experts, the fundamental difference between the oil market today and the market of a few years ago is the increase in speculative investment in the futures market by financial institutions such as pension funds, investment banks and hedge funds. Lehman Brothers, for example, in its May 29 Energy Special Report, Oil Dot-com, stated:

"We have argued recently that some of the price buoyancy during Q1 reflected financial flows and investments in oil and other commodities. In our Energy Special Report on May 16, Is it a Bubble, we argued that large investor purchases of commodity indices and other structured products had a measurable effect on prices during the period leading up to the beginning of Q2. The motivation of investors—mostly institutional investors from pension, endowment, and sovereign wealth funds — was to take advantage of current commodity fundamentals with the expectation that commodities would outperform equities and bonds in the period ahead."

As Senator Carl Levin of Michigan, the home state of my company's largest hub, noted in a floor statement on June 12, the number of futures and options contracts held by speculators in oil on the New York Mercantile Exchange has increased from 100,000 contracts in 2001 to 1.2 million contracts today. He noted that this represents 40 percent of the oil futures and options contracts on the exchange, compared with 20 percent in 2001.

From the perspective of the airline industry, which has observed the oil market closely for many years because of the significance of fuel costs to our industry, the volume of speculative activity has greatly exacerbated the volatility of the market. In our view, the volume of speculative activity has translated directly into speculative momentum that has placed upward pressure on oil prices irrespective of market fundamentals.

The original purpose of the futures market – to allow end users and producers to hedge against future price fluctuations – has been subverted. When futures prices are driven by speculative activity, hedging becomes a high-risk activity for producers and users. Because futures prices are a determinant of spot prices, end users of petroleum products, such as airlines, are forced to pay prices which bear a certain relation to the economics of oil production or consumption and therefore cannot be planned for.

Several factors, including changes in the law, have combined to induce this phenomenon. A primary culprit is the ability to trade energy commodities on unregulated markets – exchanges that the CFTC does not regulate. This is known as the "Enron Loophole," which was codified by the Commodities Futures Modernization Act of 2000. The Enron Loophole created a specific exemption from regulation for certain electronic exchanges trading energy products.

A second culprit is the so-called "London Loophole," which exempts foreign exchanges from CFTC regulation even when facilitating trades in U.S. WTI crude oil futures. Under both loopholes, transactions are not subject to U.S. margin requirements, position limits or reporting requirements. Regulation also is avoided using the so-called "Swaps Loophole," which has allowed certain bilateral transactions to escape CFTC regulation and oversight, and which has led index funds to obtain administrative exemptions from CFTC position limits that are imposed on other speculative investors.

The surge of investment money from pension and other investment funds into the oil futures markets cannot be ignored. Money from pension and other passive investment funds has poured into the commodities markets as the stock markets have suffered from a weak economy and a weak dollar. Indeed, as reported in the Wall Street Journal, the head of NYSE Euronext, Duncan Niederauer, recently acknowledged that "pension funds have made commodities a part of their investment portfolios and are investing in them regularly… Frankly, that completely alters the supply and demand for these commodities…I think that's what's driving it." (WSJ, June 18, 2008).

All of these factors have combined to encourage excessive speculative trading that has resulted in "unwarranted changes" – to quote the CEA – in oil futures prices and, as a result, the spot market for oil.

We recognize that other factors are at play, including supply and demand fundamentals and the declining value of the U.S. dollar. Consequently, we support an energy policy that also addresses our nation's oil supply and consumption. A sound energy policy will encourage the development of alternative fuels for transportation use and enable the United States to increase its supply of crude oil in a way that respects environmental concerns; we support the exploration and development of our own natural supplies of oil and natural gas. A sound energy policy also will encourage efficiency and measures to moderate demand over time.

We need to address the declining value of the U.S. dollar. Because of the weak value of the dollar, U.S. airlines are, at times, paying a 50% premium for jet fuel.

But our immediate concern is the purpose of today's hearing - energy speculation. We firmly believe that additional regulation is, in fact, required. To address this situation, the ATA has developed a list of common-sense measures that will level the playing field between regulated and unregulated exchanges and which, as a consequence, should squeeze from the market the speculator premium.

ATA's recommendations are:

- Enact legislation to prohibit pension funds, long recognized as public-purpose entities, from investing in energy commodities. It would relieve the upward pressure on oil prices in the futures markets. This will protect both the individuals who rely on their pensions to fund their retirements and the Pension Benefit Guaranty Corporation, who would have to take over failed pension plans.

- Close the Enron, London and Swaps loopholes that permit institutional investors to avoid CFTC regulations and oversight by trading on unregulated and foreign exchanges.

- Require CFTC to reclassify all the positions in the "commercial trader" category of its "Commitments of Traders Reports" to distinguish between positions held by "bona fide physical hedgers" and passive institutional investors (speculators).

- Require the commodity exchanges, and the CFTC in emergencies, to increase the margin requirements for institutional investors. This will help reduce the volume of speculative trading.

- Require more transparency and give the CFTC more authority to obtain transaction information and price reports. This will allow better monitoring by CFTC, enabling it to actively enforce its rules and regulations.

- Require CFTC to work with the United Kingdom and other countries with commodity futures exchanges to promote efforts to make sure that traders using exchanges or trading bilaterally outside of exchanges are subject to the same limits and reporting requirements. This will improve oversight and help ensure fair and equal treatment for all participants.

- Increase funding to the CFTC to ensure it has the resources it needs to investigate and regulate the increasingly complex U.S. and world energy markets.

In conclusion, we urge swift, bipartisan action to address skyrocketing oil prices that are adversely affecting the U.S. airline industry.

Mr. STUPAK. Mr. Williams, your opening statement. I would ask you to pull that mike up there a little bit.

STATEMENT OF STEVEN R. WILLIAMS, CHAIRMAN AND CEO, MAVERICK USA, INC.

Mr. WILLIAMS. Mr. Chairman and members of the subcommittee, my wife and I started our company in 1980 with one truck. We employ nearly 2,000 people today and operate a little over 1,500 tractors. And our company serves the steel, building materials, and flat glass industries.

In 2007, despite revenues of 300 million, we lost money for the first time in our 27-year history of the company. Our fuel bill increased $12 million between '06 and '07, and we were not able to recover this increase due to the weak economy and, frankly, a loss of pricing power.

The national average price of diesel, of diesel fuel, on June 16th was $4.62. If this price remains constant for the rest of the year, our company's fuel bill will increase by 49 million this year, from 66 million to 115 million, a 72 percent increase.

The fuel crisis is having a dramatic effect on the trucking community at large. Tom Albrecht, an analyst with Stephens Inc., wrote in June that these fuel prices could force as many as 14 to 16 percent of the trucking industry to cease operations. Not only will this further reduce capacity in the market, it will make the used truck market even worse, for, you see, there are few domestic buyers for used equipment, and over the last year we as a company have been forced to wholesale our tractors to Russia and to Vietnam.

But the implications to the U.S. economy obviously are of much greater concern. Energy experts can certainly lend more to this debate than I on the impact that speculation is having on the energy markets. But, for example, Professor Greenberger testified on June the 3rd before the U.S. Senate Commerce Committee and said, "By any objective assessment, the crude oil market is now overwhelmingly dominated by speculation." We've heard an awful lot about that already today, but at a minimum, energy trader statements continue to be, at a minimum, self-fulfilling prophesies.

Additionally, oil prices simply do not reflect the fundamentals of supply and demand. Tim Evans, an energy futures analyst at Citigroup, wrote on June 5th that if demand growth is faltering and supply is rising, just as economics would predict should occur in the face of rising prices, just why are prices remaining so persistently strong," end of his quote.

I would like to thank the subcommittee's interest in examining ways to regulate this activity. And to whatever degree commodity prices are affected by speculation in the market, we must eliminate this unnecessary burden on our economy and we must do so quickly. I would emphasize "quickly."

I believe that our efforts to deal with the current costs of fuel must be part of a comprehensive strategy, and the strategy must first focus on the factors that are driving the cost of diesel.

Second, the strategy must include regulatory policies that will allow our industry to be better stewards of resources that we have, a strategy that could reduce our dependence on foreign oil and improve the quality of our environment.

We need an overall strategy that can improve fuel efficiency and safety while serving the U.S. economy that will be twice its current size within the next 20 years. Trucks will continue to deliver most of our Nation's goods; however, in order to meet the demands of our society, 87 percent more trucks will be required than are currently on our highways. This will further increase congestion, air pollution, and will burn even more fuel.

In order to meet this challenge, we must consider policies to limit vehicle speeds, create incentives for limiting—for adopting environmental and safety technologies, invest in highway system capacity to reduce highway congestion, and safely improve vehicle productivity.

We must encourage the use of renewable fuels, but as a part of a sensible national fuel standard. We must assess the true value proposition of renewable fuels, such as corn ethanol and biodiesel. We must understand the implications of their productions and the conditions of their use. Increased domestic exploration and increased refining capacity must be encouraged when they can be expanded in an environmentally responsible fashion.

I have voluntarily invested tens of millions of dollars in virtually all of the fuel-saving, safety-improving technologies that are available in the market today, but it is going to take much more than that. It requires a globally competitive regulatory change to enable the continued evolution of the trucking industry to safely meet our Nation's needs.

I have authored and offer a comprehensive strategy to meet the challenges that we face. And this document has been—as a part of this attachment, this document details specific action items, and it is titled U.S. Freight Transportation Sustainability Initiative.

I appreciate this opportunity, Mr. Chairman, to offer my insight into measures that this Nation should take to address the high cost of petroleum. Thank you.

Mr. STUPAK. Thank you, Mr. Williams.

[The prepared statement of Mr. Williams follows:]

Testimony of

Steven R. Williams

Chairman and Chief Executive Officer

Maverick USA, Inc.

before the

Subcommittee on Oversight and Investigations

Committee on Energy and Commerce

United States House of Representatives

Washington, DC

June 23, 2008

Mr. Chairman and Members of the sub-committee:

My name is Steve Williams and I am the Chairman and CEO of Maverick USA in Little Rock Arkansas.

I have also served as a three time chairman of the Arkansas Trucking Association and am a former chairman of the American Trucking Associations. I am on the Executive Committees of the American Transportation Research Institute and the Transportation Research Board of the National Academies of Science.

My company, Maverick USA, operates the second largest company-owned flatbed fleet in the United States. We employ nearly 2,000 people and operate more than 1,500 tractors. My company serves the steel, building material and the flat glass industries.

In 2007, despite revenues of $300 million we lost money for the first time in our 27 year history. Our fuel bill increased by $12,000,000 between 2006 and 2007, and we were not able to recover this increase due to a weak economy.

The national average price of diesel fuel on June 16, 2008, was $4.62 per gallon. If this price remains constant for the rest of this year, our company's fuel bill will increase from $66,923,000 last year to $114,954,000 this year, a 72% increase in one year.

The fuel crisis is having a dramatic effect on the trucking community. Tom Albrecht, an industry analyst with Stephens, Inc., wrote on June 10, 2008, that these fuel prices could force 14 percent to 16 percent of the trucking industry to cease operations.

Not only will this further reduce capacity from the market, it will make the used truck market even worse. There are few domestic buyers for used equipment and over the last year we have been forced to wholesale our tractors to Russia and Vietnam.

But the implications to the US economy are of even greater concern. Energy experts can lend more to the debate than I on the impact that speculation is having on the energy markets.

For example, Michael Greenberger, of the University of Maryland, testified on June 3, 2008, before the U.S. Senate Commerce Committee that, "By any objective assessment, the crude oil market is now overwhelmingly dominated by speculation, most of which is not subject to the age old controls imposed on speculators in these markets. One can easily see then how Goldman Sachs, a huge trader in these markets itself, could confidently predict that oil will soon reach $200 per barrel."

Additionally, oil prices simply do no reflect the fundamentals of supply and demand. Tim Evans, an energy futures analyst at Citigroup, wrote on June 5, 2008, that "if demand growth is faltering and supply is rising, just as economics would predict should occur in the face of rising prices, just why are prices remaining so persistently strong?" Mr. Evans has raised a question that I hope this subcommittee will try and answer.

I would like to thank this subcommittee's interest in examining ways to regulate this activity. To whatever degree commodity prices are affected by speculation in the market, we must eliminate this unnecessary burden on our economy and we must do so quickly.

I believe that our efforts to deal with the current cost of fuel must be part of a comprehensive strategy. This strategy must first focus on what factors are driving the cost of diesel. Second, the strategy must include regulatory policies that will allow our industry to be better stewards of our resources, a strategy that can reduce our dependence on foreign oil and improve the quality of our environment.

We need an overall strategy that can improve fuel efficiency and safety while serving a US economy that will be twice its current size within the next 20 years. Trucks will continue to deliver most of our nation's goods. However, to meet the demands of our society, 87 percent more trucks will be required than are currently on our highways. This will further increase highway congestion, air pollution and will burn even more fuel.

In order to meet this challenge, we must consider policies to limit vehicle speeds; create incentives for adopting environmental and safety technologies; invest in highway system capacity, reduce highway congestion and safely improve vehicle productivity.

We must encourage the use of renewable fuels but as a part of a sensible National Fuel Standard. We must assess the true value proposition of renewable fuels such as corn-ethanol and bio-diesel. We must understand the implications of their production and the conditions of their use.

Increased domestic exploration and increased refining capacity must be encouraged when they can be expanded in an environmentally responsible fashion.

I have voluntarily invested tens of millions of dollars in virtually all of the fuel saving, safety improving technologies available on the market today. It is going to take more than that. It requires globally competitive regulatory changes to enable the continued evolution of the trucking industry to safely meet our nation's needs.

I have authored and offer a comprehensive strategy to meet the challenges we face. This document details specific action items and is titled U.S. Freight and Transportation Sustainability Initiative.

I appreciate this opportunity to offer my insight into measures that this nation should take to help address the high cost of petroleum.

Thank you.

"U.S. FREIGHT AND TRANSPORTATION SUSTAINABILITY INITIATIVE"

Steve Williams
Chairman and CEO
Maverick USA, Inc.

January 2008

U.S. FREIGHT AND TRANSPORTATION SUSTAINABILITY INITIATIVE

THE CURRENT SITUATION

The United States economy depends on a multi-modal transportation freight network, a system that delivers more than 19 billion tons of freight each year at a value exceeding $13 trillion. This means that on a typical day in the United States, more than 53 million tons of freight valued at $36 billion moves on the nation's freight network.

Of all transportation modes, the trucking industry is the most popular for shipping freight, handling more than $8.8 trillion each year, delivering 87 percent of all manufactured goods, and employing more people than the other modes combined.

> *"Whether measured by value, weight, or ton-miles of the composite estimates, trucking as a single mode (including for hire and private use) was the most frequently used mode, hauling an estimated 70 percent of the total value, 60 percent of the weight, and 34 percent of the overall ton-miles."*
>
> *"The Bottom Line"*
> *U.S. Department of Transportation Bureau of Transportation Statistics*
> *(2002)*

Transportation modes are going to be challenged to meet the needs of the U.S. economy. The
U.S. Department of Transportation projects that freight tonnage will more than double by 2035. Again, trucks and the people who drive them will continue to deliver most of this freight.

CURRENT AND PROJECTED SHIPMENTS BY MILLIONS OF TONS

Mode	2002	2035
Truck	11,539	22,814
Rail	1,879	3,525
Water	701	1,041
Air & Air/Truck	10	27
Intermodal (Includes water/truck; rail/truck; postal, courier)	1,292	2,598
Pipeline	3,905	7,172
Total	**19,326**	**37,178**

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management Operations, Freight Analysis Framework, 2006

CURRENT AND PROJECTED SHIPMENTS BY BILLIONS OF DOLLARS

Mode	2002	2035
Truck	8,856	23,767
Rail	382	702
Water	103	151
Air & Air/Truck	663	2,455
Intermodal (Includes water/truck; rail/truck; postal; courier)	1,967	8,966
Pipeline	1,149	2,357
Total	**13,120**	**38,399**

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, 2006

Unfortunately, the nation's infrastructure, particularly its bridges and highways, cannot accommodate current, much less projected, economic growth. For example, while the economy has doubled in size over the last 20 years, the total number of Interstate lane miles increased only 18 percent between 1980 and 2005.

More relevant is the pace of highway construction, which slowed over the same period. In fact, between 1991 and 2005, states added only 1,594 miles or 4 percent to our highway system. This lack of investment in system capacity has increased congestion and pollution while simultaneously reducing US productivity.

THE CHALLENGE

Fundamentally, the growth of the US economy necessitates that the trucking industry deliver more freight over an increasingly congested infrastructure while simultaneously improving highway safety.

Politicians must assume more responsibility to ensure that the trucking industry can meet this challenge. A lack of political will to raise federal taxes has spawned waves of unacceptable alternatives— decentralization, privatization and the subsequent tolling of existing highways and other so-called creative highway financing alternatives. Further, increasing highway safety cannot occur unless government provides the necessary funds to enforce safety regulations.

This current regulatory doctrine, our lack of investment in infrastructure and no rationalized transportation strategy puts this nation at a competitive disadvantage with other industrialized nations.

The trucking industry is further challenged to meet its objectives due to unprecedented fuel prices, necessary but expensive environmental protections, and a shortage of qualified drivers.

THE SOLUTION

The following legislative and regulatory recommendations are inter-related and mutually dependent. If adopted as a comprehensive package, the trucking industry will meet the needs of a growing economy safely, efficiently and in an environmentally friendly manner. These initiatives are not designed to impose economic regulation.

There are five legislative and regulatory sections:

Safety
Environment
Workforce
Infrastructure
Productivity

SAFETY

The following components will improve highway safety:

- increase minimum financial responsibility requirements for motor carriers from $700k to $5 million
- provide incentives to install Integrated Vehicle Based Safety Systems (IVBSS)
- mandate electronic on-board recorders (EOBRs) in all commercial trucks
- pass federal pre-emptive primary seat belt laws for all vehicles
- require increased training standards for entry-level truck drivers
- create a national database for commercial drivers who test positive on drug and alcohol exams
- create a national database to track commercial drivers that violate hours of service rules
- expedite FMCSA rulemaking pertaining to 391.25 (ENS) Employer

Notification System
- set a maximum speed limit for all commercial vehicles
- mandate speed governors on all commercial vehicles
- increase shipper responsibility for non-compliance of hours-of-service rules

Safety Highlights

The trucking industry must operate safely in an environment that will become more complex and congested. Stakeholders must be assured that the people who operate equipment are "privileged" to do so and are well-trained, highly skilled, drug and alcohol free, and sufficiently rested.

The use of various safety technologies such as collision avoidance, roll stability and lane departure systems can save lives. However, their use is currently voluntary and not widely implemented due to their initial cost. The broader use of Integrated Vehicle Based Safety Systems (IVBSS) should be promoted by providing a tax credit to purchasers of commercial motor vehicles equipped with certain advanced safety technologies.

The trucking industry is composed of large national enterprises as well as a host of small businesses. In fact, 91 percent of motor carriers are small businesses, operating 20 or fewer trucks. All trucking companies, whether the largest or smallest, operate in the same business environment, one that is extremely competitive with narrow profit margins. The mandatory use of electronic onboard recorders (EOBRs) in all commercial trucks, regardless of the company's size, is the foundation upon which other system improvements can be built. Also required should be adequate funding to enforce mandatory compliance of EOBRs. The EOBR and the financial support required to insure its compliance are critical pieces to ensure that all segments of the industry operate on a "level playing field." The EOBR and the financial support required to ensure compliance of hours-of-service is a critical piece allowing the industry a level playing field that is necessary to rationalize the industry's further investment in the capacity needed to meet the demands of a growing economy.

If shippers are complicit in allowing motor carriers to ignore regulations, they should be held accountable. Carriers that consistently ignore federal hours-of-service rules should be tracked to determine if there are also commonalities among shippers with corresponding penalties accruing to these shippers.

Funding should be adequate to ensure a higher degree of compliance with federal hours-of-service regulations, a factor that will further increase the cost of transportation however.

ENVIRONMENT

The following components will improve the environment:

- pass a pre-emptive Federal anti-idling mandate
- pass a federal bio-diesel mandate not to exceed a 5 percent blend
- provide incentives for early adoption of clean engine technology
- mandate speed limiting governors in all commercial vehicles, a measure that will conserve fuel and improve highway safety

Environmental Highlights

The trucking industry is committed to a clean environment. In fact, trucking was the first transportation mode to embrace advanced diesel engine emission control systems. Beginning in 2002, the industry began buying new engines that incorporated exhaust gas recirculation (EGR) and other emission control technologies that reduced harmful nitrogen oxide (NOx).

In 2007, new diesel engines were required by law to incorporate diesel particulate filters (DPFs) to reduce tailpipe emissions of particulate matter (PM) by 90 percent. These new regulations will ultimately result in a 90 percent reduction in NOx.

To enable the use of these new emission reduction technologies, the trucking industry began using ultra-low sulfur diesel fuel (ULSD) in 2006. ULSD now represents the vast majority of the on-road diesel fuel purchased in the US and has reined in sulfur levels to near-zero (15 parts/million).

These latest efforts to improve air quality continue a nearly quarter-century trend of reducing truck emissions. In 2002, on-road diesel engines contributed approximately one percent of the nation's total emissions of volatile organic compounds, carbon monoxide and sulfur dioxide, less than 1.5 percent of the nation's total emissions of NOx and account for less than 6 percent of the nation's greenhouse gas emissions.

Nationally, on-road heavy-duty diesel trucks produce half as much fine particulates as off road sources, including construction and farm equipment, locomotive, and marine vessels. When compared to the EPA's 2002 emissions inventory baseline, PM and NOx emissions from heavy-duty trucks will be reduced by more than 40 percent by 2010 and by more than 70 percent by 2020 due to stricter engine and diesel fuel standards.

The US can learn from its European counterparts by adopting incentives to encourage the early adoption of technology to meet clean engine mandates.

A national speed limit for vehicles should not exceed 65 miles per hour. Maximum truck speeds should be governed at no more than 65 miles per hour for new vehicles. The rate of speed by which a truck travels is directly related to fuel consumption. In turn, fuel consumption is directly related to levels of pollutants. On average, a truck traveling at 65 mph versus 75 mph will burn 27 percent less fuel. Through better speed enforcement for cars and trucks, dramatic improvements in air quality could be achieved.

The trucking industry supports the development of alternative fuels, including the use of bio-diesel when the percentage blended is limited to 5 percent.

The industry understands that cities, counties, and state governments want to limit pollution. However, adopting a variety of well-intentioned truck idling regulations throughout the country will create a myriad of confusing regulations. Further, these regulations often have a negative impact on the quality of life of drivers. They can actually increase driver fatigue and possibly jeopardize public safety. There must be a pre-emptive federal regulation to harmonize various state, county and cities ordinances for vehicles that operate in interstate commerce. A uniform standard of specifications must be established to insure the development and investment in technology solutions that meet a national standard.

WORKFORCE

The following workforce components will help ensure that the trucking industry can attract and keep qualified labor:

- targeted funding for driver training
- change DOL classification of truck driver from unskilled to skilled labor

Workforce Highlights

The demographics of our population have changed dramatically. Not only is the population from which the trucking industry hires shrinking more dramatically than the general population, their average age is increasing rapidly. While the gross domestic product (GDP) continues to increase demand, research indicates that the trucking industry will need to hire an average of 54,000 additional drivers per year due to growth of the industry and retirement. The current driver shortage is estimated at 20,000 and is expected to grow to 111,000 by 2010.

There are fewer qualified truck drivers due to these changing workforce demographics. As demand for more drivers goes up, drivers will more likely operate in a more congested and challenging environment but will have less experience and be less qualified than today's operators. Training standards must be strengthened to ensure that tomorrow's truck drivers operate their equipment safely.

Adjusted for inflation, the average truck driver in the US is working for less money today than he did 27 years ago. In the future, increased demand for drivers who can comply with a more disciplined regulatory environment will command relatively higher wages. It is worth noting that these good paying "driving jobs" cannot be exported to other nations.

The federal government should include greater support for initiatives that will support the training of drivers of commercial vehicles. The US Department of Labor should change the classification of truck drivers from unskilled to skilled labor. There should be greater oversight of curriculum and performance standards for CDL schools. This will have a positive impact on not only the numbers of individuals eligible to operate trucks but will help their ability to operate them safely on our nation's highways. Currently, there are driving schools that are not much more than "CDL mills," more interested in graduating students and collecting tuition than in efficiently preparing men and women to operate commercial vehicles safely.

INFRASTRUCTURE

The following Infrastructure Components will provide the funding necessary to improve the nation's highways and bridges to meet the needs of a growing economy:

- dramatically increase funding for nation's highway infrastructure
- preserve the federal diesel fuel tax
- preserve the federal highway use tax (FHUT)
- preserve the federal excise tax (FET)
- promote greater Inter-modal (truck-rail) connectivity
- no privatization of the federal highway system
- ban toll road conversion of existing segments of the federal highway system
- develop a new federal network of freight corridors
- strategic placement of rest areas for commercial vehicles

Infrastructure Highlights

The current tax system for funding infrastructure works well. The system should offer the structural flexibility necessary to respond to the new fuel saving technologies that will come on line in the years ahead in the US commercial fleet market.

The combination of State Fuel Taxes, Federal Fuel taxes, Federal Highway Use Taxes, and Federal Excise Tax create a tax mechanism that works. The rates simply need to change to respond to improvements in fuel consumption and class of vehicle.

More importantly, the legislative and executive branches of government must have the political courage to raise our taxes, an action that the commercial trucking industry will support under certain conditions.

The trucking industry will support "what is required" in order to respond to this national crisis as long as these additional revenues are dedicated to highways of national significance or freight corridors. The federal government should use a centralized approach to build and maintain our highway system going forward.

The nation's highways must accommodate its drivers safely. For example, truck drivers must have a sufficient number of rest areas and parking to ensure they receive the rest that federal regulations require. There is a current shortage of truck parking spaces along our nation's primary freight corridors. Drivers who are forced to use exit ramps to sleep are being ticketed, disrupting rest cycles and yet no other options are available.

PRODUCTIVITY

The following productivity components will ensure that the trucking industry efficiently meets the demands for freight delivery while minimizing congestion:

- modify truck size and weight regulations
- protect state grandfather rights
- support 53 feet as the federal maximum and minimum trailer length limit on the National Highway Network
- harmonize western state LCV size and weight limits per The Federal Highway Administration's Western Uniformity Scenario Analysis.
- allow limited use of longer combination vehicles (LCVs) operations beyond the Western Scenario states.
- increase the combined gross vehicle weight on semi-trucks with six axles to 97,000 lbs.

Productivity Highlights

Despite having the most developed highway system in the world, the United States has the most restrictive truck size and weight regulations of any developed country. At the same time, America's freight transportation demands are greater than any other nation.

While trains have gotten longer and planes and ships are larger, thereby increasing their productivity, the trucking industry remains in a holding pattern despite hauling most of the nation's freight. Congress froze all truck size and weight regulations more than 25 years ago. During that period, GDP grew from $3 trillion in 1982 to $12.5 trillion in 2005. The total number of vehicle miles traveled by commercial vehicles has grown proportionally on a National Highway System that has grown by less than 18 percent.

More Productive Vehicles (MPVs) should be allowed to operate in the US where it makes operational sense for them to do so. MPVs currently operate safely in various regions of the country. However, they are not allowed in other parts for various reasons, usually political, despite recommendations by the National Academies of Sciences' Transportation Research Board and the US Department of Transportation's 'Truck Size and Weight' study it released in 2000.

Not only do MPVs have a positive impact on the environment, they have a positive impact on highway safety. Their safety record is superior to their traditional counterparts. Additionally, MPVs reduce the number of vehicle miles traveled (VMT) therefore reducing risk.

Increasing truck size and weight regulations will reduce air pollution by 11-35 percent, depending on the MPV being used. Coupled with improvements in anti-idling technology, wide base tires, improved aerodynamics, lowering vehicle speed, new engine technology and with the properly scaled development and distribution of bio-diesel, our dependence on foreign oil could be cut in half in the near term (when measured by the ton mile).

CONCLUSION

Politics surrounding the upcoming federal highway reauthorization process and a current void in having a national transportation policy threaten to bring the nation's transportation system and the economy to its knees. Our leaders need to find their collective North Star.

Unless we find a way to upgrade our nation's largest public works project, the interstate highway network, our country could soon find itself at a competitive disadvantage in the global economy.

With the unprecedented growth of the trucking industry, of which 87 percent is truckload and 13 percent is less-than-truckload, since the industry was deregulated in 1980, the cost of trucking has declined to 4.8 percent of GDP, its lowest level on record. This trend cannot be sustained nor should it until radical changes are made in improving productivity (far exceeding state-of-the-art).

Logistics cost as a percentage of GDP will trend upward from the current low. Investments in technology to improve safety and the environment; investments in workforce training and development; investments in infrastructure will all come at a tremendous price and will drive up total logistics cost. In fact, every solution required to meet the challenge that we face will add cost.

Supporting this comprehensive trucking initiative will allow the industry to improve productivity safely and efficiently. This improvement in productivity, frozen for over a quarter of a century, will be the primary offset to mitigate the increased cost of transportation. However, more importantly, as transportation cost are poised to increase as a percentage of GDP, American consumers will be investing in transportation solutions that will allow the trucking industry to meet its charge to move the nation's freight while improving highway safety and the quality of the environment.

Mr. STUPAK. Mr. Guilford, your opening statement, please, sir.

STATEMENT OF EUGENE A. GUILFORD, JR., EXECUTIVE DIRECTOR AND CEO, INDEPENDENT CONNECTICUT PETROLEUM ASSOCIATION

Mr. GUILFORD. Thank you, Mr. Chairman, members of the committee.

In March of 2004 our association went to Connecticut First District Congressman John Larson with concerns about the behavior of the energy commodity markets, the enormous daily volatility we were seeing in those markets, and asked if our congressman couldn't work with other Members of Congress to initiate a Government Accountability Office study of the authorities of the Commodities Futures Trading Commission to determine if the CFTC had sufficient authority and resources to properly oversee all energy complex trading activities.

Our members, on behalf of our heating oil consumers in our State, are physical traders. We offer to our consumers the opportunity to lock in their heating oil prices for the summer—for the winter, rather—so this is an extremely important issue to us and to our customers.

When that study's results came back, we learned that the CFTC had multiple loopholes in its statutory authorities without reason, not the least of which we now know to be the Enron loophole, the swap trade loophole, and the foreign board of trade loophole, effectively blinding the CFTC to more than half of the daily activities in the daily complex.

In short, we learned that the CFTC did not have sufficient authority and resources, and while Congress recently closed the Enron loophole, we know we have more to do.

The evidence of the need of this inquiry here and elsewhere in Congress is clear. On Black Friday, June 6th, 2008, crude oil hit an all-time high of $139.12 a barrel. Heating oil and gasoline hit new highs of $3.98 and $3.55 a gallon respectively. The total crude oil traded on the NYMEX that day equaled over 1 billion barrels, or 12 days of world consumption and 214 days of U.S. consumption. Four billion barrels of heating oil were traded, equaling half of the total U.S. consumption of heating oil in 1 year.

Wall Street's justification for sending this multibillion dollar energy bill to America pointed to: A, one Morgan Stanley analyst's view of crude oil going to $150 a barrel by the 4th of July after having declined $15 a barrel in the previous week; B, European central banks worrying about inflation and increasing interest rates driving down the value of the dollar, increasing the billions flowing from investment banks and hedge funds into commodities; and C, the Israeli Transportation Minister threatening Iran over its nuclear program.

Not even when Hurricanes Katrina and Rita actually did damage to America's energy production did prices rise as much as on June 6th, 2008, and nothing that happened that Friday had any bearing on energy production. It was entirely speculation-driven fear on the part of Wall Street.

The average service station operator we represent had to spend $8,000 for a load of gasoline in 2002 and now, for that same load of gasoline, spends over $25,000. The average 2.5-million-gallon heating oil distributor that had to capitalize just over $1 million for the heating season in 1998–99 for wholesale heating oil, will need to capitalize over $9 million in the coming heating season, more than three times the net value of the company itself. In 1 month, next January 2009, this average local heating oil retailer will sell 20 percent of its annual volume, requiring $2 million in credit, just to buy wholesale heating oil for the general public, in 1 month.

Now, in a world of trillions and billions, that may not seem like a lot, but multiply that times 300 heating oil retailers needing $2 million each, and pretty soon that's real money. And we're a small State. Multiply that times 25 oil-heat States, and you a have tremendous amount of capital that's going to be needed just to get us through this coming season. And we face the same credit crunch as every other American when it comes to attempting to borrow these staggering sums just to be able to serve our customers.

These crushing prices hurt not just the least well off of our customers, whose annual low-income energy assistance benefit paid for less than half of last year's energy needs and it will pay for less than a quarter of next year's energy needs based on where prices are headed, but these prices now drive the middle class to taking longer to pay their bills as they rely increasingly on using credit cards just to get by.

More than a quarter of our customers were over 45 days late in paying their energy bills at the end of the recent heating season. In short, America was drowning in a sea of red ink trying to cope with energy costs, from airlines to trucking companies to large and small businesses, agricultural and everyday Americans.

We advocate strong and immediate actions to close the foreign boards of trade and swap trader loopholes in current law. We advocate for strong and immediate actions to substantially reduce the role of noncommercial energy complex investors as they are now buying more paper contracts than physical energy. And where they cannot accept physical energy itself, their role in the energy market trading should be severely restrained.

You will hear that such actions will reduce liquidity and potentially drive prices higher. We are all drowning in the liquidity pumped into this system from hedge funds, investment banks, index funds, and derivatives traders.

We had no liquidity issues in 2002 in a market that operated with greater stability and certainty as the point of price discovery that it was meant to be with significantly less participation from noncommercial financial interests. This debate, to us, is about the liquidity we lack in being able to serve our customers, and our customers' lack of liquidity in being able to afford the energy they need to run their businesses, to use transportation, and to heat and cool their homes.

Our members are taking strong advantage of alternative fuel opportunities that this Congress has provided them; more than 30 percent are involved in biofuels. Our State has been the first in the Nation to create a fuel oil conservation fund and board specifically designed to reduce the amount of fuel oil that is used in our State by upgrading old, inefficient heating systems to new, high-efficiency heating systems by taking advantage of some of our industry's best technology. So we're trying the best we can on the demand side.

Finally, this isn't just about oil and gasoline. The December 2008 NYMEX contract for natural gas has increased in value 83 percent since January, a harbinger of higher electricity and heating costs. In the coming months, just around the corner for natural gas users, prices have already started to rise for end-user consumers of natural gas. So there doesn't appear to be anywhere anyone can go in order to escape the reality of higher energy costs in America.

Thank you. And I would be happy to answer any questions you might have.

[The prepared statement of Mr. Guilford follows:]

Testimony of
Mr. Gene Guilford
Independent Connecticut Petroleum Association
and the New England Fuel Institute

Before the
United States House of Representatives
Committee on Energy & Commerce
Subcommittee for Oversight & Investigations

Washington, DC
June 23, 2008

Honorable Chairman Stupak, Ranking Member Shimkus and distinguished members of the committee, thank you for the invitation to testify before you today on the issue of speculation and alleged manipulation in the energy commodities markets, and its impact on independent, small business energy distributors and their customers.

About NEFI & ICPA

I testify before you today as Executive Director of the Independent Connecticut Petroleum Association[1]. Our association was formed in 1950 and represents 549 independent, locally owned and operated motor fuels and heating fuels distributors in Connecticut that serve 682,000 heating consumers.

I also testify on behalf of the New England Fuel Institute (NEFI)[2], a 60-year-old trade group and public policy advocate representing well over 1,000 heating fuel dealers and related services companies in the Northeastern United States. NEFI member companies market heating oil, bioheat, propane, kerosene, biodiesel, jet fuel, off-road diesel and motor vehicle fuels.

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[1] Official website www.icpa.org

[2] Official website www.nefi.com.

"Black Friday" Proves Excessive Speculation No Longer A Myth

On Friday, June 6th, the day that my industry is now calling oil trading "Black Friday," crude oil hit an all-time record of $139.12. Heating oil and gasoline closed at new highs of $3.98 and $3.55, respectively. Trading that day was at unprecedented volumes as well as prices. 1.09 billion barrels of crude oil were traded that day, 53 times daily U.S. consumption. Also that day, 99 million barrels of heating oil were traded, *half of total U.S. consumption per year.* Mr. Chairman, we are no longer confident that the markets are doing their job of providing our industry and consumers with a benchmark for pricing product that is based on economic dynamics of supply and demand, and they no longer function as a risk management tool. They have become completely disconnected from reality. Is excessive speculation a reality? The events of June 6th have shattered all doubt.

Americans all over the country are joining us in this debate. Millions of people around the world are being priced out of the vital consumables that they rely on each and every day to feed their families, get to work and heat their homes. It is the latter of these struggles that has my industry gravely concerned. Consumers are watching food prices skyrocket, while grocery store shelves remain stocked. They see once unthinkable prices at the pump without the long lines at gasoline stations experienced during the oil embargoes of the 1970s. The "sticker shock" experienced by home heating customers on receipt of their oil or gas bill begs the question of their utility company or dealer, "are you running low on supply?" The answer of course is, "no." No, we are not running out of energy. Or food. Yet, millions of Americans, especially low income and middle class Americans, are made subject to a roller coaster ride of speculative excess that favors not the small heating oil company or gasoline station owner, but rather the financially-driven non-physical commodities market trader.

How do you explain a rise in crude oil from 50 dollars to nearly 140 over just 16 months? One need not be an economist to accurately observe that there was no tripling of demand or sudden shock in supply, especially not in our industry. The role of the financial community is more clear.

- America's financial institutions have an estimated $260 billion invested in energy commodities now, up from $13 billion in 2002 – a staggering 1,900% increase. During this same time crude oil's price has increased 600%
- According to the Bank for International Settlements, as of 31st December 2007, the total amount of OTC commodity contracts outstanding came to $9 trillion – up from $7.1 trillion the previous year, bringing a total of $1.9 trillion of new investments into commodity derivatives during 2007.
- Let's assume that oil represents about 70% of those contracts, which seems like a fair assumption given that oil is about 70% of the major commodity indices. 70% of $1.9 trillion is about $1.33 trillion. Even if we assume that all those commodity contracts used zero leverage (which is most likely not true), such an amount of money going into the oil market in a single year is certainly enough to move prices.

My fellow witnesses today will explain to you how much speculation is playing a role in the markets and whether or not traders are "gaming" or manipulating the system. Mr. Chairman, I am no trade expert, but as a representative of small businesses heating fuel dealers, I am able offer you expertise on the effect that this speculative fervor has had on our members and their customers, and what it could mean for home heating in the upcoming winter.

The Effect on Small Businesses Petroleum Marketers

Petroleum marketers, like other small businesses, are required to secure lines of credit with a bank and supplier in order to purchase the product their retail consumers' demand. In the current environment, the doubling in price of motor and heating fuels over the last 16 months has forced these marketers to request a two-fold in their credit lines – and many are being denied. All the while, cash flow is slow to come in from customer receivables, especially from low income heating oil customers that have exhausted their fuel assistance money and are feeling the overall pressure of a slowing economy. **The average 2.5 million gallon heating oil company in our state that had to capitalize $1,150,000 for wholesale oil in 98/99 is looking at $9,125,000 in 08/09. That same company sells 20% of their annual volume in January [500,000 gals], and will need $2 million in credit to purchase oil on 10 or 30 day terms and wait 30-45-60 days to be paid by consumers, or longer. $2 million in credit for one month.**

Small, independent gasoline, diesel fuel and heating oil dealers continue to hold out hope that Government will act soon to mitigate the speculative bonanza in the futures markets, but they must look to their public officials for a more immediate solution to the "credit crunch" they are currently experiencing. These people need access to the credit required to purchase gasoline, heating oil and other essential fuels in order to meet the needs of their customers, and in the current environment many struggle to do so.

With high prices come high call volumes from customers looking for an explanation. Retail gasoline and heating oil dealers and their employees have had to explain the unexplainable, and difficult to explain volatility in the energy markets to their customers. Additionally, retail heating oil dealers have had to increase their customer communications efforts in order to stave off unwarranted negative public relations regarding the image of "oil" and the misperception that retail heating oil dealers are "gouging or amassing vast profits like the major oil companies.

These informative efforts seem to be paying off, and the public is finally starting to come around. In a Gallup Poll published earlier this month, when asked "who's to blame" for rising energy costs, the public pointed to Wall Street speculators at 30 percent, up from six percent just two weeks prior- they were tied with Congress for the number one spot. The American public is now looking to this Congress to act, and to act decisively, as are our member companies and other small business around the country. The companies are struggling to remain competitive and to provide the quality products and services our economy depends on – the very things that have made this country a world leader.

I am also pleased to announce that my industry, lead by the New England Fuel Institute and the Petroleum Marketers Association of America, is spearheading a massive consumer outreach campaign called "StopOilSpeculators.com." Independent energy distributors, including heating fuel dealers and gasoline station owners and operators, will disseminate print materials explaining the role opaque and unregulated commodities trading plays in the sky-high prices they now face. Consumers will be given an opportunity to write Congress and urge immediate action. A similar campaign in the New England, New Jersey and New York State region earlier this year produced over 50,000 messages to Congress. By widening this campaign to all fifty states, all members of this Congress will be hearing more from their constituents very soon.

Public Policy Solutions

So what can Congress do to help solve the problem? Many policies currently being touted on both sides of the isle seek to address the unprecedented run-up in energy prices. But these proposed initiatives miss the mark because they assume that prices are tied to a shortage of supply and an increase in demand. They assume that by increasing supply or by moving to alternatives- thereby reducing demand- their proposals will have a real and tangible effect on the market and, consequently, consumer prices.

Proponents of alternative energy are using the current environment to justify a quick and progressive advance toward an array of "renewable" and "sustainable" energy sources. Our industry agrees that alternatives must be developed in order to reduce our dependence on foreign oil and provide cost-effective alternatives to fossil fuels. However, to do so without correcting the opaque nature of the futures market could subject these emerging energy sources to the same volatility and speculation that today afflicts conventional fossil fuels and other commodities.

Alternatively, others on Capitol Hill have called for a quick lifting of the ban on off-shore drilling and in other areas with bans on oil recovery, such as the Arctic National Wildlife Refuge. Our industry supports and endorses proposals to increase domestic production of oil through both conventional means such as drilling and unconventional means such as coal-to-liquids technology. However, increasing domestic supply of oil will have little or no impact on the speculative price of a barrel of oil because these markets have become dislocated from supply and demand economics. For example, OPEC has repeatedly submitted that its attempts to increase production have fallen on the deaf ears of the speculator, and have thus translated to little or no global price relief.

Congress must move quickly and assertively to address dysfunction within the markets by:

1. implementing across-the-board transparency and accountability requirements on all energy trading environments, all market participants and for all sizes of positions held by closing the so-called "London," "Dubai" and "Swap Trader" loopholes;
2. substantially reducing speculation limits and raising margin requirements for all energy commodities;
3. setting aggregate position limits based on positions held in all trading environments and mechanisms;
4. substantially reducing the role non-commercial energy complex investors play in buying paper contracts where these players cannot and do not ultimately accept delivery of the physical energy being traded on paper;

5. implementing tough new financial consequences and mandatory jail sentences for market manipulators;
6. pressuring the CFTC to aggressively enforce existing and future authorities; and
7. doubling CFTC funding in order to provide it with the personnel and resources it needs to effectively monitor the markets to insure the are stable, function and that all trading is subject to the rule of law.

Opponents to greater transparency and regulation argue that such measures will bring about an "exodus" to off-shore trading environments. First of all, such a statement implies that there is some sort of unethical or abusive trading occurring that one would wish to take off-shore in the first place. Second, if these phenomena were to be a real consequence of fully transparent and accountable U.S. markets, and trading was to move off-shore, we must follow it. U.S. authorities should lead the way in establishing a new and international monitoring regime, and they should work to develop new relationships with overseas regulatory agencies. **The President should make this a priority issue and engage with other G8 leaders on this issue when the meet in Japan next month.**

Finally, we hope that Congress will take a look at the heating oil contract on the New York Mercantile Exchange, or NYMEX. When the contract was created by NYMEX in 1978, heating oil consumption was much greater than diesel consumption, and therefore was used as a principle proxy for diesel fuel and other distillates. Today, even though diesel fuel consumption volumes have well surpassed heating oil consumption volumes, diesel and jet fuel is still hedged off of the NYMEX heating oil contract. As a result, heating oil may be forced to ride the increasing domestic and foreign demand for diesel fuel. This would explain the spring and early summer spikes in heating oil prices that our industry is seeing, despite a bottoming out of domestic heating oil demand. **Congress should work with heating oil industry leaders and experts to determine whether or not diesel fuel and heating oil contracts should be separate NYMEX offerings.**

Thank you again, Mr. Chairman, for this opportunity to share my insight on this issue. I commend you and your colleagues in this committee for looking hard at this issue, and for championing public policy solutions that will help to insure transparent, accountable and stable commodities futures markets. I am open to any questions that you might have.

Testimony of Mr. Gene Guilford
Summary of Main Points
June 23, 2008

- Excessive speculation is very real, as evidenced by the run-up in commodity prices in the past 16-months and, more recently, the events of "Black Friday," June 6th.
- American consumers are the hardest hit by this speculative fervor. Consumers are acknowledging the role of speculation, and are demanding action by Congress and federal authorities at the CFTC.
- Small businesses are also hit hard, especially small business motor fuel and heating fuel companies. Fuel dealers have experienced a strain in cash flow due to consumer financial hardship, and their credit lines are not increasing proportionate to the increase in prices – making it more difficult to obtain the product they need, when the need it.
- The petroleum marketing industry has announced a major grassroots campaign, stopoilspeculatorsc.com, to educate consumers on the role of speculation in increased gasoline, diesel fuel, heating oil and other energy prices.
- Congress should pass laws or place appropriate pressure on the CFTC to increase close the "London," "Dubai" and "Swaps" loopholes, and to insure full transparency and anti-manipulation rules on all trading activities and environments.
- The administration needs to engage word leaders and regulators in a new global commodities trading regime, and this conversation should start at the G8 in July.
- The NYMEX heating oil contract, which is used to hedge diesel fuel and jet fuel, may need to be split to offer two different contracts.

Mr. STUPAK. Thank you. And thank you all for your testimony.

Mr. Steenland, at the outset let me note, your testimony contains a number of helpful recommendations: reduce excessive speculation in energy market such as closing the Enron loophole, or the London loophole as some call it; closing the swaps; and sealing off some of the exemptions that have contributed to the rapid run-up in oil speculation.

Is dealing with the impacts of market speculation the highest priority for the airline industry?

Mr. STEENLAND. I think the highest priority is to tackle the overall price of fuel, given the fact that it is now 40 percent of our total cost pie.

And when we look at it, we think the solution is a multifaceted solution and that clearly addressing the financial speculation, I think, is the most immediate thing that the Congress can do.

I think we would also recognize, as the first panel did, that there are longer-term issues that have to be addressed in the form of supply, in the form of conservation. We ourselves are investing $6 billion in terms of a new fleet that will be more cost effective, but when you think about the kind of impact on the price of crude that the remedies for financial speculation were talked about, whether it is $30 or $40 a barrel or whether it is $60 or $70 a barrel, and the fact that those changes, those price impacts if they are true are likely to happen very, very quickly, that's what brings us to the point of recommending that the Congress act with alacrity and look to tackle on these reforms promptly, hopefully prior to the August recess, so we can see some of the price rollbacks happening now. Because the impact of those price increases is truly devastating.

Mr. STUPAK. What percentage of the increase in your oil costs can you actually put on a ticket, pass on to the consumer? Do you pass it all on? Do you pass part of it on?

Mr. STEENLAND. Clearly, we have not passed all of it on. Partly it is due to the speed with which this has occurred. If you just look at our first quarter, for example, our fuel bill for operating basically the same size airline went up by about $450 million. And our pretax profit. This year, we had a pretax loss versus the pretax profit. That gap was about—we deteriorated to the tune of about $250 million. Our energy costs went up $450 million. Our profitability swung by about $250 million.

Mr. STUPAK. So what would you say to the consumer out there? How much has their airline ticket gone up because of oil prices—20 percent? 30 percent? 40 percent?

Mr. STEENLAND. It probably depends where you are. So some places, it probably has gone up 20 or 30 percent; others, it has not gone up very much at all.

The unfortunate reality is that it hasn't gone up enough to offset the price increases that we have seen so far. So if you take the prices that are now in the market and you simply carry them forward, because we've been sort of chasing this price going up, and if you assume that these are the prices for the next 12 months, the next 24 months, the price of air travel is going to materially increase over what it is today.

Mr. STUPAK. What happens if it stays at $140 a barrel? Is there going to be an airline industry left?

Mr. STEENLAND. Well, I think there will always be an airline industry, but I think the industry will be much smaller than what it is today simply because the number of consumers that can afford what air travel is going to be at those rates is clearly going to be less; and the industry is going to have to right-size itself to deal with the fewer number of people that will be traveling.

Mr. STUPAK. Thank you.

Mr. Williams, with diesel at about $5 a gallon, how many firms have gone under? And what's the outlook for your industry?

Mr. WILLIAMS. Well, the only time this has occurred prior, where there has been a significant loss in capacity, was in 2001. But all the records would indicate that we're in uncharted waters here. The acceleration of failures is increasing. Again, the 10 to 15 percent would represent 150 to 200,000 individual units, and the numbers are hard to get because—I think it is important for people to understand, when they think of the trucking industry—91 percent of what we would call "the capacity that exists in the market" is made up of carriers that have 20 trucks or less; the remaining 9 percent maybe represents 60 percent of the overall capacity. So it's a very fragmented community.

A lot of those people that have gone out of business, they don't send out press releases and say, we've quit. You will just find the truck in a yard, or you will find the truck on a used truck lot somewhere, so it takes a while for that data to come in.

But it is going to get much worse as—there are an awful lot of mid-sized carriers that are—that have failed, but due to credit extensions and the fact that there is such a tremendous amount of used equipment sitting with no buyers in this market, that situation will get much worse before it gets better.

Mr. STUPAK. Let me ask you what I asked Mr. Steenland, on the—how much can you actually pass through to the customer? You said you haul steel. How much of that cost—do you pass the whole increased cost to the company you're hauling the steel for?

Mr. WILLIAMS. In 2007, when our fuel prices increased and the economy was extremely soft, we were not able to pass that on, and therefore, we had—again, our first net loss.

Mr. STUPAK. First loss, yes.

Mr. WILLIAMS. This year, things are better. We're actually holding our own. We are almost back to break even, which I never thought would look good. But it is simply a—the economy is not recovered in those segments that we serve; it is simply because of capacity that has gone out of the market. Therefore, we have our pricing power again.

I think I can respond to that a little easier by saying, for example, the steel industry, whose prices of their steel maybe are up threefold this year and are doing quite well, still cannot move their product to market because of capacity.

The building material side of the business, business is off 30 percent compared to last year. And last year was a horrible year. They can't move what little shipments they have. They have trouble moving it.

And certainly the flat glass industry is suffering from a lot of the same issues.

So the impact and the supply/demand equation for us simply is being driven by a lot of capacity leaving the market. And those people that remain will be able to raise their prices to recover that fuel.

Mr. STUPAK. A lot of our constituents are saying, when I go to the store, things cost more, cost more because of that, the transportation cost. Is that a fair statement?

Mr. WILLIAMS. We are and continue trying to pass our costs on, and it will vary from market segment to market segment depending on the capacity that is still in that marketplace.

Customers—again, in '07 it was the same situation, but in '07, did not keep this as whole as they currently are. And you will see the price in the various products we haul will certainly have to increase as the cost of fuel continues to rise. There is no doubt about it.

Mr. STUPAK. Mr. Guilford, you recommend that Congress take a look at heating and oil futures contracts, and you suggest heating oil may skyrocket far in excess of supply and demand simply because diesel costs are hedged against the price of heating oil, even though diesel volumes far exceed heating oil volumes.

Has your industry raised this with NYMEX or the Commodities Futures Trade Commission?

Mr. GUILFORD. Yes. We've explored the idea of separating the heating oil and the diesel fuel contract, but we are not exactly certain what the consequences of that would be yet.

Mr. STUPAK. Were they receptive to this idea of splitting them?

Mr. GUILFORD. Sure. I think that they are receptive to listening to the idea about whether or not the contract should be separated, but we all understand the responsibility to make sure we understand what the potential consequences of doing that would be before it's actually done.

So it's important to us that we understand that first, and I think one of the examples of why it is important to continue that discussion is what happened on June the 6th. The heating oil contract went up $0.29 that day, the heating oil contract on the eve of one of the most severe heat waves in the northeastern United States. Clearly, it wasn't driven by demand—not a lot of people using heating during that period of time. So it seems to us reasonable that we would want to explore that.

Mr. STUPAK. Thank you.

Mr. Whitfield for questions.

Mr. WHITFIELD. Thank you, Mr. Chairman.

Mr. Steenland, did I understand you to say that your jet fuel costs over the last year increased by $420 million in 1 year?

Mr. STEENLAND. If that were only true. We expect our 2008 costs to be almost $2 billion more than our 2007 costs.

Mr. WHITFIELD. This is fuel costs only?

Mr. STEENLAND. This is fuel costs, right. And for the U.S. carriers we expect costs to be over $20 billion higher in '08 versus '07.

Mr. WHITFIELD. Well, obviously you can't operate very long with fuel costs that high, I would assume.

But what steps can you take, as CEO, under the current market conditions to address this issue? What steps are available to you?

Mr. STEENLAND. Well, the most immediate effect is to look to try to pass these costs through, onto the customer, and that's not always effective because customers—passengers don't always have to fly. And when the price of air travel gets a little too high, some elect to drive in lieu thereof, take alternative vacations. Business travelers may elect to stay home. So there is clearly an elasticity here.

Other options are to look to recognize that demand is going to go down and fly less.

Mr. WHITFIELD. So can you cancel routes on your own, or do you have to get some regulatory approval to do that?

Mr. STEENLAND. You can do it on your own. And every major U.S. Airline has announced significant capacity reductions in the fourth quarter when you measure the size they are going to be this year versus the size they were going to be last year.

Mr. WHITFIELD. Mr. Williams, in the trucking business, what percent of your business would be under contract and what would be what I would refer to as a "spot market"?

Mr. WILLIAMS. Oh, unlike the pre-deregulation market where it was more regulated, almost everyone still operates under what would be characterized as a contract——

Mr. WHITFIELD. OK.

Mr. WILLIAMS [continuing]. Market. But it is handled—the discipline functions more as a "spot market," quite frankly.

Mr. WHITFIELD. So under the terms of the contract, you cannot readily pass on those fuel costs to the shipper?

Mr. WILLIAMS. No.

There is traditionally a fuel surcharge mechanism that's a function of that, but unfortunately, the way the price of fuel has moved, it has never kept us whole. Prices continuing to increase were always behind and then the burden of cash flow, certainly for many of the operators, is a burden as well.

Mr. WHITFIELD. You said your fuel costs increased by $12 million last year?

Mr. WILLIAMS. That was between '06 and '07. It actually has gone up—we're projecting it to go up $50 million this year.

Mr. WHITFIELD. $50 million?

Mr. WILLIAMS. $50 million.

Mr. WHITFIELD. Well, I know that both of you do support the proposals to reform that the first panel had suggested, and we certainly are looking into that.

I want to approach this from a little different perspective, Mr. Williams, and that relates to—I was reading an article that said that the U.S. has the stiffest diesel emission standards in the world, and that trucks meeting those standards get on an average of 3 miles per gallon.

Now, is that accurate or is that misstated?

Mr. WILLIAMS. I would say that's been misstated.

Mr. WHITFIELD. OK.

Mr. WILLIAMS. The facts are that as we have met the most recent APA mandates, I believe in '02, '07, we'll have a 2010 coming. In the first two series of those, we actually lost fuel efficiency as we were achieving the goal of improving the exhaust emissions.

We support that, and we have tried to invest in technologies and systems that would enable us to have an offset. We certainly want to continue to support that, but the reality is, we actually ended up running the same miles, burn more fuel to accomplish the cleaner environment.

Mr. WHITFIELD. So you're——

Mr. WILLIAMS. But the numbers more—my fleet average is 6.7 miles per gallon.

Mr. WHITFIELD. 6.7 miles, OK.

Mr. WILLIAMS. So the 3 would be—there's actually, unfortunately, probably equipment that still remains in the fleet that would maybe operate at that level.

Mr. WHITFIELD. Well, I think it is important that we talk about this, because we do all want to protect the environment. But we also know that, in doing that, it is raising our costs, and it is going to raise fuel costs.

And I read this quote in an article comparing trucking in China and trucking in America. And it talks about in China a $23,000 diesel engine would meet Euro 2 requirements. The Euro requirements go up to 4. And in the U.S. the trucks that we buy are in the neighborhood of $47- to $50,000 per diesel engine, and yet we're getting like 6 miles to a gallon. I mean—yes, 6 miles to a gallon.

But I just appreciated your comments on that, because I didn't know what the actual facts were.

Mr. WILLIAMS. Well, I think it's important that we're missing—it is interesting, listening to the previous panel's remarks and the fact that we have—it has taken $5 diesel and $4 gas for us to be talking about this. And yet there are so many things we have within our control regardless of the price that will allow our fleets to be much more efficient, but we have chosen to not accept the challenge of trying to make the regulatory changes that need to be made.

But the U.S. has the most restricted truck size, weight policies, of any industrialized nation on this planet.

Mr. WHITFIELD. Right.

Mr. WILLIAMS. And it will be interesting to see if we're still enamored with doing the right thing if prices fortunately were to come down. Because I think quite frankly there is a motivation to do an awful lot of things we need to be doing regardless of the price, going to the point about emissions and overall sustainability of our industry; and I think that we need to spend a lot of time talking about those as well.

Mr. WHITFIELD. It affects our competitiveness with countries like China and so forth. Thank you.

Mr. MELANCON [presiding]. Thank you, Mr. Whitfield.

Chairman Dingell is coming. Do you have any questions?

Mr. DINGELL. Mr. Chairman, thank you. Mr. Steenland, welcome. You served the committee of the country well, and I am very grateful to you.

Mr. Steenland, as I understand it, Northwest Airlines uses a futures market to hedge its fuel costs. However, I believe you are now encountering a market that has been thrown so far out of bounds by pure speculation and speculators that prices no longer reflect the true fundamentals of supply and demand.

Is that statement correct?

Mr. STEENLAND. We believe that that is true, Mr. Chairman.

Mr. DINGELL. What is the practical effect of that?

Mr. STEENLAND. The practical effect, as we have seen, is an increase over the last 10 months in the price of oil, over $70 a barrel, which puts oil in completely uncharted waters and threatens the integrity of the airline industry as we know it.

Mr. DINGELL. But in your view, the market no longer exists as a proper hedging tool for you and for the rest of industry because of the fact that it has gotten so distorted; is that correct?

Mr. STEENLAND. Well, I think it is primarily the financial players that are in the market that are—whether it is the "video barrels" or "paper barrels," whatever you call them, that's clearly had the sort of the retro-rocket impact on the price of fuel.

We hedge today where we can. It is not very attractive at these prices, but when you consider what the run-up is, we look to basically buy some insurance policy against prices going even higher. So we do that, and the market's available to do that, and it is an important piece of the energy process, but it is clearly the financial players that have had the impact that we've all testified to and talked about this morning.

Mr. DINGELL. On page 8 of your testimony you gave us some superb recommendations, but just to try to summarize, would raising market margin requirements on speculators have a positive effect on the market?

Mr. STEENLAND. We believe it would.

Mr. DINGELL. To what degree and why?

Mr. STEENLAND. Well, I think by taking some of the leverage out of the business so you're not just putting up 5 percent, but you're putting up 50 percent or 33 percent, depending upon the recommendations. That may mean that there will be less liquidity and less pressure coming in on the futures market, which clearly—as that price continues to move up, it affects the spot price that we have to pay.

Mr. DINGELL. Mr. Williams and Mr. Guilford, would you like to comment on that last question?

Would raising margin requirements to speculators have a positive effect on the market?

Mr. GUILFORD. Yes, we think that it would, although we have a question about, if you're operating a $5 billion hedge fund in Fairfield County and, for example, you have the ability to invest a million dollars at 9 o'clock in the morning to leverage $100 million worth of heating oil and you cash out that position at 4 o'clock in the afternoon and book $3.6 million profit, whether increasing just the margin requirements is going to be sufficient. Because frankly, if you gave me that deal, I'd probably take it every day even if I had to put more money on the table.

Mr. DINGELL. Mr. Williams.

Mr. WILLIAMS. I would have to defer to the previous panel to respond to that.

But I think it is important to note in regards to the earlier comments related to hedging. The trucking industry operates on such narrow margins that the notion that there is significant hedging in our marketplace, I think would be wrong.

Mr. DINGELL. So you can't—what you're telling us is, you can't take advantage of the hedging market because of your margins?

Mr. WILLIAMS. To whatever degree trucking is hedging, it is very minimal. And it has historically been that way, because we cannot—it is a risk to come to work every day.

Mr. DINGELL. I don't mean to cut you off, but I have many questions and little time.

Starting with Mr. Steenland, would closing the London loophole, the swaps loophole, and the Enron loophole have a positive effect on the market?

Mr. STEENLAND. We believe it would, by creating greater transparency and clear opportunities to regulate where appropriate.

Mr. DINGELL. Mr. Guilford?

Mr. GUILFORD. Yes, sir.

Mr. DINGELL. How important is it, gentlemen, for the Congress to get their—the government to get its arms around the problem of excessive speculation in the energy markets?

And you, Mr. Steenland, would this be a matter of high priority to the airline industry at this time?

Mr. STEENLAND. Very high. And if you just think back to what our panelists said this morning, while they had differences of opinion, I think they ranged from $30 a barrel to $70 a barrel as to what they thought the impact would be of the series of recommendations that are on the table.

Mr. DINGELL. Thank you.

Mr. Guilford.

Mr. GUILFORD. To put it in context with the 8 billion gallons of heating oil used in this country each year—and we have seen an increase of $2 a gallon just in the last 12 months—then it has cost consumers an additional $16 billion for our product. So——

Mr. DINGELL. So you're telling me it's a matter of urgent concern?

Mr. GUILFORD. Yes, Mr. Chairman. Soon.

TheCHAIRMAN. How about you, Mr. Williams?

Mr. WILLIAMS. Urgent.

Mr. DINGELL. I'm sorry. I thought you answered.

Mr. WILLIAMS. No. I'm saying it is urgent and it is extremely urgent. And I thought it was interesting that a lot of the questions related to the implications for the manager and for the funds themselves. And I can tell you, there are a whole bunch of people in America driving cars and driving trucks that are having difficulty getting to work today and I would say we need to move extremely fast.

And that would be my opinion, sir.

Mr. DINGELL. I would love to ask you all this question, but I notice the clock has run out on me: what are the consequences if the Congress doesn't act on this matter? May I have unanimous consent for 1 more minute?

Mr. STUPAK [presiding]. Without objection.

Mr. DINGELL. Thank you, Mr. Chairman.

Mr. Steenland.

Mr. STEENLAND. I think the consequences, we'll all be spending more for oil than we otherwise need to.

Mr. DINGELL. Mr. Williams.

Mr. WILLIAMS. I would agree. And there will be a tremendous loss of capacity within the commercial fleet, and those that remain will actually have a very difficult time meeting the shipping needs of the community.

Mr. DINGELL. Thank you.

Mr. Guilford.

Mr. GUILFORD. Well, it's oil, it's natural gas, it's gasoline, it's people's ability to get back and forth from work. It ripples throughout the entire economy.

And, frankly, the $2.5 billion that Congress spent last year on low-income energy assistance is probably going to have to be more like $7 billion just to keep up, and that's just for low-income energy assistance.

Mr. DINGELL. Mr. Chairman, I thank you and my colleagues for your grace and kindness to me.

I yield back the balance of my time.

Mr. STUPAK. Thank you, Mr. Dingell.

Mr. Barton for questions, please.

Mr. BARTON. Thank you, Mr. Chairman.

Mr. Steenland, I've been told that Southwest Airlines has had an advantage in the airline industry because several years ago they were prescient enough to hedge in the markets and get a fuel cost advantage, and that they've continued to maintain that advantage in this market.

Is that a true statement?

Mr. STEENLAND. Southwest made, in my judgment, one of the great bets of all time when it made its fuel wagers back in, I think it was the 2002–2003 time frame. And so they've enjoyed a significant advantage over the rest of us who did—either couldn't or did not make that former bet.

Mr. BARTON. Now, I understand that the first time Southwest did it, the rest of the industry didn't see a need to, it wasn't the fact that they couldn't. But this time around, in speaking with Gerard Arpey, who is the CEO of American Airlines, that is headquartered within shouting distance of my district, he indicated that American is doing some hedging, but they just don't have the financial ability to do as much as Southwest continues to do.

Would you agree that generically Southwest just has—because of their cash flow position and their profitability, has had a greater ability to hedge than some of the other airlines who have been in bankruptcy or close to bankruptcy?

Mr. STEENLAND. Well, they clearly have a balance sheet advantage over the rest of the industry. Back in that 2002–2003 time frame, that really allowed them to make that wager, where the rest of us really couldn't because we didn't have the balance sheet or the assets to provide counter-party risk.

And so when one makes those kind of bets, sometimes you are right, sometimes you are wrong. You have a party on the other side who is making the counter.

Mr. BARTON. Right.

Mr. STEENLAND. So being able to participate in hedging doesn't automatically mean that your fuel bill is going to be lower. But in this instance, Southwest clearly was the beneficiary of a very brave and, in hindsight, very smart move.

Mr. BARTON. Now, the last question on this subject before I go to the next subject. I always assumed that Southwest was playing in the futures market, but I was told this morning that they were actually buying options on the Chicago commodities market.

Do you know if that's true or not?

Mr. STEENLAND. I don't.

There are any number of ways that one can participate in this, one can actually buy—buy options going forward. One can put in place collars so you have a protection against the runaway price on the top and, in return, you give up some potential upside if prices drop below a certain amount. So the cafeteria list of the ways in which one could hedge are an almost infinite list.

And you can either—two ways of doing it are either by looking to actually buy the product going forward and locking in your price, or approaching it more like an insurance policy and looking to get protections against what otherwise might be a runaway price.

Mr. BARTON. Are you testifying on behalf of the airline industry or just for Northwest?

Mr. STEENLAND. I'm wearing both hats.

Mr. BARTON. OK.

Does the airline industry support the two-tiered system that we talked about in the first panel, where market participants who actually take physical possession and are willing to provide physical delivery would play under a different set of rules than nonphysical participants who were in it purely for the financial opportunity?

Does the airline industry support that?

Mr. STEENLAND. I don't think we've specifically addressed that, Congressman. If it would result in lower prices and talking out some of the speculative activity by people that are purely playing on the "video barrel" side, I believe we would support that.

Mr. BARTON. And aviation fuel that commercial airliners use, it is not gasoline, it's not diesel. It is a form of kerosene, is that——

Mr. STEENLAND. That is correct.

Mr. BARTON. And so I guess it is theoretically possible we could do something on that specific fuel type that might be of some help to the airline industry.

Mr. STEENLAND. It all ultimately comes out of the crude oil barrel. But we've actually been faced with a double whammy where the crack spread to take that crude and refine it into jet has also been at historic highs over the course of the last several months.

So when people talk about oil at $130 a barrel, a lot of times you have to add $30 to then refine it into jet. And so we've been talking about $160 a barrel for jet fuel.

Mr. BARTON. Right now, if I were to go to a municipal airport in my congressional district where general aviation planes fuel up, what's the approximate price they would pay for a gallon of aviation fuel?

Mr. STEENLAND. I think well north of $4.

Mr. BARTON. So it is higher? It's similar to gasoline but not as high as diesel?

Mr. STEENLAND. I don't know where diesel is trading. And sometimes what comes out of the FBOs tends to be a little higher because it has taxes and stuff built in it, but it will be north of $4.

Mr. BARTON. OK.

Mr. Williams, you own a trucking firm; is that correct?

Mr. WILLIAMS. Yes, sir.

Mr. BARTON. Those in your industry that are going out of business—and we were told that there are approximately 1000 trucking companies a month that are going out of business—is it principally because they don't have the capitalization to pay the higher fuel costs as they fuel their trucks in routine operations?

Mr. WILLIAMS. Yes, sir, it's—again, there's a large segment of the community that is poorly capitalized and has been mostly cash flow operators for many years. And they have a great deal of difficulty in these markets.

And then there are certainly much larger carriers that are public companies that are certainly well capitalized, but they also bear an awful—probably not as much——

Mr. BARTON. My time has expired.

The companies that are managing to stay in business, they apparently are—I think you said in your opening statement, you are being able to pass through some of your increased fuel costs; is that correct? It is a better market than it was in that regard?

Mr. WILLIAMS. Driven by a lack of capacity and competition within that marketplace, yes—not because of the good-naturedness.

Mr. BARTON. Oh, I know, I understand that. And in the airline industry, because of the competitive pressure primarily the low-cost carriers like Southwest, you're not able to pass through the fuel costs, because they are unwilling to raise the price; is that correct?

Mr. STEENLAND. That is clearly a reason.

Another reason is excess capacity in the market; given that, it's just difficult to pass price, sir.

Mr. BARTON. Thank you, Mr. Chairman.

Mr. STUPAK. If I may comment on that, did Southwest increase their fares? I mean, they always advertise nothing more than $299; and aren't they now at $549, I think I read in USA Today?

Mr. STEENLAND. Southwest has not been immune, and yes, they have been on occasion taking fare increases. But I think it would be fair to say that the level of fare increases and the frequency of them has been less than what the network carriers have been looking to try to get.

Mr. STUPAK. Thank you.

Mr. Inslee for questions.

Mr. INSLEE. Mr. Barton noted a different kind of fuel in aircraft. I have to point with some pride to the first commercial flight using a nonoil-based fuel, using a biofuel, was in a plane built in my district, or next to my district, the Boeing 747 with Virgin Air, using a biofuel designed in my State by people at Imperium Energy. And we could have some good things happening there, and we will look forward to that.

This is a fairly unusual situation, I think, where three major pillars of our economy that you represent here hard-headed business people come and ask the government to do something in a market, in a capitalistic market, and I think that's kind of unusual.

When I and others urged the Administration to intervene during the original Enron debacle, the Vice President sort of told us we didn't understand economics and sort of implicitly said we were a bunch of economist hippies who didn't understand how capital markets work.

You are suggesting the government has to do something to allow the capital markets to really function. At its base level, could you just explain to us why, in this particular circumstance, you believe that that's necessary?

Why should government have to do anything here that the markets just can't figure out themselves?

Mr. GUILFORD. Congressman Inslee, our Congressman is John Larson from Connecticut. And he is fond of sending me clips from the Congressional Record where he gives floor statements where he is addressing these issues, where he refers to his "rock-rib Republican constituents" who are talking to him about the problems with these markets. And he is talking about us. There are probably no greater defenders of the free-enterprise system than we are.

But where we see what should be free, open, transparent markets that are as free of manipulation as is humanly possible to create significantly, at least in our opinion, out of sync with reality, then we have no choice but to ask for Government to step in and bring order to what should be a marketplace that works as a point of price discovery, as opposed to what it has turned into.

Mr. STEENLAND. If I could just add, the commodities market is a regulated market. There have been changes in it that have gone on over time. And when you see today where the financial side of the market is 13 times what the physical side is and then you see the volatility that exists in that market, I think it creates the necessity to have a discussion like we are having today to revisit whether the regulatory structure that is now in place is the appropriate one, and whether changes should be made to get us back into a mode that better reflects what supply and demand and more realistic prices should be.

Mr. INSLEE. So I assume you don't believe this is a fool's errand. I assume by your comments that you don't think this will simply drive these investments offshore and we will have no regulatory control of them.

Why do you believe this will be successful and not believe that people will just flee to some foreign market beyond our control?

Mr. STEENLAND. Well, I think the panelists this morning addressed that issue. And they are far more expert at this subject than I am. But when you see all the other folks who are experts in this come to the same conclusion, I think it certainly leads the airline industry to the view that these are appropriate and necessary steps to take very promptly.

Mr. INSLEE. Thank you.

Mr. STUPAK. Mr. Walden for questions.

Mr. WALDEN. Thank you very much, Mr. Chairman.

I want to talk about, Mr. Williams, about the issue with trucking, because it is now costing, what, about $1,400 to fill up a truck with diesel every time you go somewhere and haul goods?

Mr. WILLIAMS. And I get to do that every day just about.

Mr. WALDEN. And the trucks that you have that are surplus that you said you are selling overseas, I think you said into Vietnam and other countries, is part of that because of the new requirements on fuel and engines here in the United States, that they can't be reused here efficiently?

Mr. WILLIAMS. No, sir. The market is just so poor here. I mean, there is a secondary market after we keep a truck for 42 to 48 months, for example, and get a half a million miles on it that will typically go into a secondary market, where that market doesn't exist because those people are the people that have been pretty much run out of business and have not been able to survive.

So a lot of the equipment we'll be stockpiling up, and we will have acres and acres of trucks parked in this country before it's over. And we are moving a lot of that equipment now overseas, which has not been done. But it's not because of any new mandates or anything such as that.

Mr. WALDEN. Now, this committee, or the full committee, and the Energy and Air Quality Subcommittee of this committee are looking at the issue of carbon and carbon sequestration and cap-and-trade. Estimates are that could significantly increase the price of fuel, the price of home heating oil especially, the price of fuel oil for your jets, the price of diesel for your trucks, the price of gasoline. Some estimates and some have even suggested on this committee of a minimum additional 50-cent-a-gallon increase as a price signal in the market. And whatever the price signal in the market is, it would have to be above today's fuel costs.

I am curious—from each of you, what will those cost increases mean to your industry if where you're at today is debilitating?

Mr. WILLIAMS. Could I?

Mr. WALDEN. Yes, sure.

Mr. WILLIAMS. I think it's one of the parts of this whole conversation that's a bit disturbing, in that to whatever degree the price of fuel is higher because of speculation, it's a limiting factor on us raising our taxes that we need to raise so that we can invest in infrastructure and offer some long-term solutions for our citizens.

So if, in fact, if $2 is going out, in the price of diesel, is going to the benefit of a speculator, I would prefer to see 50 cents of that, in this example, going into our Highway Trust Fund, specifically being used for investments in highways and bridges to move this Nation's freight.

Mr. WALDEN. Right, but I don't think the cap and trade proposal puts the money into roads and bridges necessarily.

Mr. WILLIAMS. I would certainly not—I think from a mobile source, I think cap and trade is not a good methodology. I do support carbon taxes, a fuel tax system, as long as that money is specifically used on infrastructure investments.

Mr. WALDEN. OK.

Mr. Steenland, how is the airline industry going to be affected under these cap-and-trade proposals?

Mr. STEENLAND. It depends on which one. A properly constructed cap-and-trade proposal, if it's global, if everybody's in it, might be a way to address the overall carbon issue.

I think we need to take a step back or two, though, because some of the policies are based on projections of growth that might've been what the industry was going to grow when fuel was at $60 a barrel, but if fuel is going to be at $130, $140 a barrel, there is going to be retraction instead of growth. And that is going to make a contribution right then and there to carbon emissions.

So some of the footprint upon which some of these policies are being based I think needs to be re-examined based upon some of the existing fuel assumptions that are out there.

Mr. WALDEN. OK.

Mr. Guilford, when you are heating with oil at home, what does another 50 cents a gallon do to the consumer?

Mr. GUILFORD. You know, the devil is in the details, Mr. Walden, because we can document in our industry through research and work that has been done at the DOE's Brookhaven National Laboratory that, in the last 25 years, we've managed to have a significant reduction in the per-consumer per-gallon consumption of heating oil because of the introduction of new technologies that our industry has brought online.

Mr. WALDEN. More fuel-efficient furnaces and all?

Mr. GUILFORD. Exactly, exactly. For example, if you can take a 65-percent-efficient furnace and turn it into an 85-percent-efficient furnace, you can cut a consumer's consumption from 1,000 to under 700 gallons.

So, depending upon how such a thing were structured, we can document that we can already meet some of the cap-and-trade ideas that we have seen.

If it ends up resulting in a significant increase in the price of our fuel, if it makes us uncompetitive, obviously that would be something that would be very detrimental to our customers.

Mr. WALDEN. Because I have heard some estimates out there are upwards of a $6 trillion shift in the economy in higher taxes. And as I listen to the woes of each of your industries today and the impact I hear at home, whether I am at the grocery store in Hood River, Oregon, or out meeting with farmers in Pine Grove or somewhere, I am trying to figure out, when it comes to cap and trade, it means you are going to pay for something you've never paid for before, and that's carbon, and that's ultimately coming out of the consumer's pocket, right?

Mr. GUILFORD. Yes.

Mr. WILLIAMS. Exactly.

Mr. WALDEN. Isn't that going to adversely affect people that you're trying to serve in your own companies?

Mr. GUILFORD. Enormously. And on the heating side, the only solution that we have is to continue to become more and more and more efficient, which clearly we have proven we have been able to do over the last 25 years, but we would need another quantum leap in that ability.

Mr. STEENLAND. I think it would be fair to say that the airline industry has literally invested tens of billions of dollars in new equipment. We, for example, are 25 percent more efficient than what we were back in 2000. So that has cost us billions of dollars, but in terms of, one, saving in fuel and, two, emitting less carbon, we have really taken a very positive step in that direction, as have our competitors.

Mr. WALDEN. Right. No, I don't doubt that. It's just a matter of what's this added cost going to do to industries and individuals and consumers that already seem to be pretty maxed out?

So thank you, Mr. Chairman.

Mr. STUPAK. Thank you.

Mr. Green for questions.

Mr. GREEN. Thank you, Mr. Chairman.

Let me first say, having watched the airline industry and the trucking industry because of the district I come from, for a number of months what the impact of the high fuel costs on our economy, you're the first to get hit, simply the canary in the mine shaft so to speak, because it's going to reverberate in everything that's delivered by the trucks and everything else. So the rest of the economy needs to cushion itself, because those costs are going up.

Mr. Steenland, in your testimony you mentioned that there are several factors affecting oil prices, and an energy policy that addresses our Nation's oil supply and consumption needs to help remedy oil prices.

In your opinion, is our current energy policy going in the right direction in addressing our supply needs? And could increased energy supplies offset some of the unnecessary price increases due to the speculation in the markets?

Mr. STEENLAND. I think as a longer-term solution, figuring out ways to, in an environmentally prudent way, to bring more supply online would be an appropriate plank in our overall energy policy, as well as looking at alternative fuels, looking at proper conservation methods.

It needs to be a total package, and we need to address it in that total way.

Mr. GREEN. I guess that's what I've heard from people; it's not a silver bullet. Sure, we need to deal with the speculators, we need to do alternatives, and hopefully, for example, the biofuel for the 747—in fact, we just opened a huge biofuel facility in Houston that is the largest refinery in the country that is nonedibles. Hopefully, those biofuels will be nonedible so we don't see the price of our food go up.

Mr. STEENLAND. But I think that's a good example, where biofuels is really a multigenerational type of approach, whereas potentially the kind of things we're talking about today, we could see an impact in 30, 60 days. Some of these other events are longer-term.

Mr. GREEN. Yes. But we need to do it all. We need alternatives and control of the current market, but also we need to produce more domestically so we can get that into the market.

Mr. STEENLAND. We do.

Mr. GREEN. In your opinion, should the ICE regulatory body, the Financial Services Authority, be called an equivalent regulatory body to the CFTC if they do not require position limits or other rules to prohibit excess speculation? Do you think the ICE's regulatory body, the Financial Services Authority, is anything equivalent to what we have with our CFTC?

Mr. STEENLAND. I would defer to someone else to answer that question.

Mr. GREEN. I'll wait until our next panel then.

Mr. Williams—and, in fact, Mr. Chairman, I'd like to submit for the record, I have a Jet Fuel Reality chart, actually presented by Continental Airlines, that appropriately is from Houston, that shows the crack spread that has increased on a monthly basis for jet fuel. As the price of oil goes up—and I was going to ask Mr. Williams, I haven't seen anything based on diesel fuel prices, because we know diesel has gone up.

Does your association or anyone have any that can compare to, for example, in April of 2001, the price of a barrel of oil was $101. The crack spread for getting to jet fuel was $27.10. Whereas on June the 9th, a little over a month later, the price of oil per barrel was $134.40, but the crack spread went up to $31.20.

Do you have any information on the diesel, how it's gone up based on any of the refining costs?

Mr. WILLIAMS. No, sir. We can make that information available to you.

Mr. GREEN. OK.

I think just for the Committee's benefit in the long term, Mr. Chairman, I would like to submit that for the record.

Mr. STUPAK. That will be submitted, without objection.

[The information appears at the conclusion of the hearing.]

Mr. STUPAK. The gentleman should know that EIA, Energy Information Agency, has provided that information on diesel. The crack spread is about 58 cents right now. It was about 47 cents. That is the wholesale crack.

Mr. GREEN. We are seeing that increase.

Mr. Guilford, I know the cost of home heating oil has increased. Have you looked at—is the volatility in the natural gas market as much as it is in the oil market?

Mr. GUILFORD. We haven't looked at it as closely as we do heating oil, because we certainly live in heating oil every day. But there seems to have been, with the closure of a loophole involving natural gas derivatives in 2004, somewhat less volatility. And I think that when the next panel meets, that Professor Greenberger can address that for you in some detail.

Mr. GREEN. OK.

Mr. Chairman, I appreciate that, because I think there has been less volatility in another hydrocarbon market that maybe we could look at and see how it comes.

I want to thank you for this panel.

Mr. STUPAK. I thank the gentleman.

Also, the EIA—I know you received a copy of the report—they looked at the first 3 months of 2008 and compared it with the other first 3 months for the last 5 years. And in diesel, in particular, they have exported from this country 335,000 barrels of diesel per day to keep the margins tight in this country. So there's plenty of supply, but what they're doing with it certainly affects the price.

Mr. Melancon for questions?

Mr. MELANCON. Thank you, Mr. Chairman.

Mr. Williams, my son graduated from high school with a young man that has been driving trucks with his dad for years. And I saw him this weekend, and he said, at the rate they're going, they're going to sell the trucks and he's going to look for a job. So I understand. And this is a good, hardworking kid. So I hate to see that happen, whether it's small operations or big operations.

I don't really have a lot of questions in this sector, because most of the things I'm concerned about are the regulators. But for each one of you, Mr. Steenland, from your perspective, how long can Northwest or the industry continue before it becomes totally devastating, from a standpoint of being able to continue as a company or as an industry?

Mr. STEENLAND. Sure. Well, for eight airlines, it's already too late. They are liquidated, and they'll never come back. Two airlines are now in Chapter 11. And other airlines, it's a function of what their total liquidity is.

And basically, the industry is going to have to—it's a bit of a race, where we're looking to pass through these costs as quickly as we can. That gets to the speed with which the price has gone up. And as those costs get passed through, as we talked about before, demand shrinks. And so we need to take capacity out.

And we need to reach that equilibrium point where customers are paying the level of airfare that clearly compensates us for our fuel bill and the industry is right-sized then to meet that demand.

Mr. MELANCON. Are you seeing reductions immediately in your passenger-carrying?

Mr. STEENLAND. Certainly.

Mr. MELANCON. Do you know what percent that is by?

Mr. STEENLAND. It's a function of—we can always put a passenger on the airplane, depending on the price that we're prepared to charge. So if you look at the usage on the airplane, it's still fairly high, but people are not paying what the true cost is of what it's costing us to provide the service.

Mr. MELANCON. Got you.

Mr. Williams, any projections?

Mr. WILLIAMS. I think well-capitalized carriers will continue to survive. But I think it's important to note that when they are wounded, as they are, they're unable to invest in a lot of the new technologies that will allow us to continue to meet our fundamental challenge, and that is to move much more freight in a much more congested environment while we improve highway safety. And that's the disservice that's actually going on here, as well. But we're wasting some time, as we need to get on about doing better things in a better way.

But even if we lose a big chunk of the market, the part that we have to understand is that this capacity leaves a lot faster than it will ever come back. And when this economy returns, which I'm very hopeful that it will soon, there is going to be a significant problem on how we get goods to market, whether it's strawberries or coil steel. And that's a very real probability.

Mr. MELANCON. I see the railroads are advertising, trying to kind of do a comparison. Have you seen a decrease in the amount of freight that you're hauling?

Mr. WILLIAMS. Certainly, the building material industry is tied directly to the housing crisis that we're facing. The steel industry is very robust, but that is principally driven by the dollar proposition by exporting more steel and importing less steel into this country. The glass side of the business is actually quite good, but that is principally to industry consolidation within that segment and exports to Canada.

So, collectively, demand is up for us currently, but it's, again, because of really a lack of capacity within the market. So we have some historic pricing power. So, I mean, that makes us feel good.

But it's the overall impact of the cost of transportation to the economy that I think needs to be our greatest concern. Because it is painful for my employees. I've closed three terminals; I actually announced that this last week. We're laying some people off in those areas. We have people that we're losing that have had to drive too far to come to work. And it's a real burden on the men and women and their families in this country.

Mr. MELANCON. Thank you.

Thank you, Mr. Chairman.

Mr. STUPAK. Thank you.

Mr. Ross for questions.

Mr. ROSS. Thank you, Mr. Chairman.

For Mr. Williams, you refer in your testimony to Congress supporting globally competitive regulatory changes. What types of changes are you referring to?

Mr. WILLIAMS. Specifically, I commented earlier about size and weight regulations. We're the weakest link in the chain. It's a global supply chain, and the United States has found itself in the precarious position of being the weakest link. We have the most restrictive size and weight regulations in this country. And so there is an opportunity there for us to increase our competitiveness by bringing ourselves up to international standards. And I think that should be a goal of ours in the years ahead.

I think the part that's interesting about that, and I alluded to this earlier, is that, will we have the appetite for doing that, though, when fuel maybe comes back down to maybe a more market-driven price, assuming that speculation is contributing to that price of oil? And that comes back to where we're doing a lot of soul-searching within our own organization, and certainly we have within the industry, about—is this all about the money or is this all about doing the right thing for the environment as well?

So I think that truck size and weight regulations is a good example of how, for example, depending on the type of more productive vehicle that's in use—and most of this equipment is in use all over this country, and certainly in every other country—ranges anywhere from 11 to 35 percent more productive.

And, for example, in my own organization, if I simply slow down, idle my equipment less, and were to take advantage of one of these particular adjustments that I'm talking about that we have regulatory power to change, I could reduce my fuel consumption by 37 percent. And that's without any new technology. And to give you an idea what that would mean to me in a marketplace that I lost money in last year, that would save me $50 million in fuel.

So I think sensible, long-term strategies on bringing ourselves more into line with what's going on with the rest of the world would have significant effects, both for the environment, for highway safety, and certainly would reduce our dependence on foreign oil. But that's going to take a constructive change.

Mr. ROSS. It would seem to me that—and I mentioned earlier I think these high fuel prices, gas, diesel, apparently next it's going to be natural gas, we'll experience that in the winter, have a direct relationship to this economic recession we're in. So I think a lot of people are wondering, how long are we looking at prices the way we are now?

And it affects everyone. I represent a lot of farmers. Diesel prices have really affected them, because that's how they irrigate and get their produce to market. Just since this meeting started, I talked to an electrical contractor who has a diesel pickup, and he requires a pickup because of the nature of his work. He said it cost him $150 to get to work today. Now, granted he drove quite a ways to get to work today, but it's unconscionable.

I had a small trucker call me recently; he just has three trucks. And he says he bids on a job, and he has to be competitive with his bid, and then overnight the price of diesel goes up, and sometimes it goes up from when he starts the job several times before he finishes the job, and there goes his profit. And what was going to be a small profit ended up, in a situation where he was losing money. And that's a small trucking firm. Obviously, you're much larger than that.

I guess where I'm going with this is, isn't it true that, whether it be the airline business—and I'd like to get an answer, too, from the airline industry—whether it's the airline business or trucking business, you are absorbing some of the increases right now, I would guess, hoping the economy turns around and hanging onto your market share. But at what point do you have to start passing all this along, and what does that do to an already-struggling economy?

And I'd like to get an answer from both of you on that, if I may.

Mr. STEENLAND. We are a very high fixed-cost business. So, we own or lease our airplanes. We can't just simply turn them on and turn them off. We have 29,000 employees that we want to keep gainfully employed. We have long-term rentals at airports. So we're paying all those costs whether we're flying or not. And so we're flying the airline, as everyone else is.

And the challenge is that we haven't yet been able to simply pass through the costs. Because, if we truly just simply posted prices out there that fully reflected what the price of jet fuel is, a number of people would say, "I'm not traveling." And an airplane seat is a perishable seat. So when it takes off today and the flight leaves Minneapolis and it's going to LA, if there's not someone paying for that seat, it's gone. It's not something we can put in inventory and sell the next day or the next day after that.

And so it puts tremendous pricing pressure on the business. And it ultimately requires the right equilibrium between those people that are prepared to pay the pass-through costs and what the size and capacity of the industry is.

And at today's prices, the industry is losing money. The U.S. airline industry will lose over $10 billion this year. And so, if this is, in fact, what the price of fuel is going forward for the longer term, airfares inevitably are going to have to go up.

Mr. ROSS. How much higher would airfares be today if all of the increased cost in fuel was being passed on to your customers?

And, by the way, thanks for getting me here this morning.

Mr. STEENLAND. Thank you.

I'd say 20 percent.

Mr. ROSS. So, to truly reflect today's energy prices, you're saying airline tickets would be 20 percent higher. I guess, at some point, if prices on energy don't come down, they will be. Right now, I'm sure it's trying to charge what the market will allow and, also, I'm sure, trying to protect or grow your market share factors into it.

If I could get a response to that from Mr. Williams, as well, because I sense that some of the smaller guys out there with two or three trucks are becoming less and less competitive and, as a result, are going to have less competition wherever this thing settles out. And what does that do to the economy?

Mr. WILLIAMS. I think we're going to see a lot of the changes that we saw post-1980, when the industry was deregulated. This is a point in time where there's going to be a significant change in the makeup, I believe, because of the burden that most of the carrying community can't continue to bear.

The gentleman that may be losing his job driving a truck that he owned might actually migrate to a company such as mine and drive a truck for me. But that doesn't limit the pain and anguish that his loss of equity in that piece of equipment, in the nest egg that maybe he or his father had generated over their entire lifetimes. And so there is going to be a lot of pain in the transition, I guess would be my point.

But I think an interesting addition to that would be the comment that we're in the process of pricing our truck order, when we will buy about 500 additional trucks next year, or they'll be replacements, those trucks are extremely more expensive and the most dramatic increase in price that I have seen in any year-to-year in all the 30 years that I've been in business. And I'm talking about in excess of 20 percent increase. And that's driven indirectly by the price of oil driving the price of steel, driving the price of tires and all the components that are within that truck, not to mention all the technology that we voluntarily purchase.

So, significant increases, and they're coming back to roost even on our own doorstep.

Mr. ROSS. Mr. Chairman, I see I'm well over my time. And thank you for being so generous in indulging me.

Mr. STUPAK. I thank the gentleman.

Well, that concludes our questions of this panel.

Let me just mention, a number of organizations have already endorsed our legislation, H.R. 6330. I know, Mr. Steenland, your organization has, Teamsters have, others. You may want to look at—give us your comments, not just 6330, but there are a number of pieces of legislation that are pending before Congress, and we're trying to take a look at them. Your testimony today has been most helpful, but it also would be helpful to have your input on some of this other legislation, whether it is 6330, my bill, the PUMP Act, or any other pieces of legislation, it would be helpful to us as we try to move something on this legislation.

But thank you for being here, and thank you for your testimony.

I now would like to call our third-panel witness to come forward.

On our third panel we have the Honorable Walter Lukken, who is the acting Chairman and Commissioner of the U.S. Commodity Futures Trading Commission.

Mr. Commissioner, as you know, it's the policy of this subcommittee to take all testimony under oath. Please be advised that you have the right, under the rules of the House, to be advised by counsel during your testimony.

Do you wish to be represented by counsel?

Mr. LUKKEN. No, thanks.

Mr. STUPAK. OK. Witness indicates he does not. Therefore, I ask you to rise and take the oath, please.

[Witness sworn.]

Mr. STUPAK. Let the record reflect the witness replied in the affirmative.

You are now under oath.

We will ask for your opening statement. You may submit a longer statement for the record. But if you would begin, please. Thank you.

STATEMENT OF WALTER LUKKEN, ACTING CHAIRMAN AND COMMISSIONER, U.S. COMMODITY FUTURES TRADING COMMISSION

Mr. LUKKEN. Thank you, Mr. Chairman and other distinguished members. And thank you for inviting me to testify before this committee on the role of speculators in the futures markets.

During the last few years, the futures markets have changed dramatically in size and complexity, experiencing 500 percent growth in both volume and products listed. Today's exchanges are technology-driven corporations that trade electronically 24 hours a day all around the globe. Approximately $5 trillion of notional transactions flow through U.S. exchanges and clearinghouses every day.

This description alone would make the oversight of these markets a challenge for regulators, but add to it the subprime crisis, record energy and agricultural commodity prices, the influx of financial funds into the futures markets, and historic low staffing levels at the CFTC, and it is clear that these are challenging times at this agency.

Recent substantial increases in the price of crude oil have put considerable strain on U.S. households. These are matters of intense focus at the Commission due to the key role that the futures markets play in the price discovery process.

The CFTC recognizes that these markets and their participants have evolved significantly in the last several years. Concerns have been raised recently regarding the role of speculators and index traders in the commodity futures markets. As prices have escalated, the CFTC has pursued an active agenda to ensure that commodity futures markets are operating free of distortion.

These initiatives fall into five broad categories: one, increasing information and transparency; two, ensuring proper market controls; three, continuing aggressive enforcement efforts; four, improving oversight coordination; and five, seeking increased funding.

The proper oversight of markets require transparency. Market regulators must receive the necessary information to conduct surveillance of market activity, study long-term financial trends, and evaluate policy changes as circumstances evolve.

The backbone of the CFTC's market surveillance program is the large trader reporting system. All large traders must file daily with the CFTC their futures and options positions in the markets. This information enables the CFTC's surveillance economists to oversee all traders of size to ensure that no one is attempting to manipulate the futures markets.

As markets have become electronic and global, the CFTC has been working to expand its trade data collection to accommodate these trends. On May 29th, the CFTC announced an agreement with the U.K. Financial Services Authority to greatly expand on the trader data already received from ICE Futures Europe on its linked crude oil contract that settles off the NYMEX benchmark, including receiving equivalent daily large trader information for all months traded. This cross-border information-sharing is unprecedented among global regulators.

The CFTC has also taken action to improve the transparency of index traders and swap dealers in the energy markets. In May, the CFTC announced that it would use its special call authorities to gather more detailed information from swap dealers on the amount of index trading in the markets and to examine whether index traders are properly classified for regulatory and reporting purposes.

These information requests have been sent, and the CFTC expects in the coming weeks to begin receiving more detailed information on index funds and other transactions that are being conducted through swap dealers. After analyzing this data, the CFTC will provide a report to Congress by September 15th regarding the scope of commodity index trading in the futures markets and recommendations for improved practices and controls, should they be required.

Last fall, the Commission worked with Congress to enact legislation as part of the Farm Bill requiring exempt commercial markets that traded linked energy contracts to provide the CFTC with large trader reports, and it posed position and accountability limits on such products. Congress and this agency believed that these authorities were necessary to protect the energy marketplace.

As noted earlier, linkages between contracts are not purely a domestic occurrence but also happen across international borders. Most energy and agricultural commodities are traded in a global marketplace, and the U.S. futures markets have been facing the challenges of cross-border trading and regulation for many years.

For more than a decade, the CFTC has utilized its mutual recognition process for foreign exchanges that allows U.S. institutions access to those markets by striking a balance between the need for U.S. regulators to ensure proper oversight of our markets and the acknowledgment that the increased globalization of international markets requires cooperation and coordination between governments.

With this balance in mind, last week the CFTC announced modifications to its foreign board of trade process. After consultation with the British FSA, the CFTC revised the access letter to ICE Futures Europe to require the implementation of position and accountability limits on its linked crude oil contract. The CFTC will also require other foreign exchanges that seek such access to provide the CFTC with large trader reports and to impose position and accountability limits for any products linked to U.S. futures contracts. This combination of enhanced information and additional controls will help the CFTC in its surveillance of its regulated domestic exchanges, while preserving the benefits of its mutual recognition program.

During these turbulent market conditions, the environment is right for those wanting to illegally manipulate the markets. In late May, the Commission took the extraordinary step of disclosing that, since December 2007, its division of enforcement has been launching a nationwide crude oil investigation into practices surrounding the purchase, transportation, storage, and trading of crude oil and its derivatives contracts. Strong enforcement is imperative during this time.

Given the CFTC's size and the enormity of the global marketplace, the CFTC must also engage others in Government as we seek to meet our important mission. Two weeks ago, the CFTC announced the formation of an interagency task force to evaluate developments in the commodity markets, which includes the staff from the CFTC, the Federal Reserve, the Department of Treasury, the SEC, the Department of Energy, and the Department of Agriculture. I have also invited the FTC and FERC to participate as well, given their expertise in these energy matters. The task force is intended to bring together the best and brightest minds in Government to aid public and regulatory understanding of these markets.

If it sounds busy, it is, especially given that the agency staffing levels are near record-low numbers. Since the CFTC opened its doors 33 years ago, volumes on U.S. futures exchanges have increased 8,000 percent. That is compared to a 12 percent decrease in staffing levels at the agency.

As the agency embarks on our new authorities and initiatives in order to respond to changing market conditions, it is imperative that these be met with adequate resources. The CFTC is in the midst of implementing its new Farm Bill authorities, which will require many programmatic changes as well as hard work from an already-strained staff. Additionally, the agency staff is racing to implement the many recent initiatives I have just outlined in my testimony. Recall, as well, that our employees are full-time regulators, charged with overseeing these markets each and every day. Without proper funding, the agency will not be able to sustain this pace much longer.

In summary, the Commission shares this committee's concern for the current conditions in energy markets and for the effects of high crude oil prices on consumers, workers, and businesses. These are difficult economic times, and the Commission recognizes the need to respond accordingly to ensure that the futures markets are working properly for all Americans.

Thank you for allowing me to testify, and I welcome any questions you may have.

[The prepared statement of Mr. Lukken follows:]

Summary of Major Points in Written Testimony of
Acting Chairman Walter Lukken
Before the House Committee on Energy and Commerce
Subcommittee on Oversight and Investigations
June 23, 2008

The futures markets and the participants in those markets have evolved dramatically in size and complexity in recent years.

Recent increases in the prices of energy and agricultural commodities have placed considerable strain on U.S. households. These issues are a matter of intense focus at the CFTC.

As conditions in the commodity markets have become challenging, the CFTC has undertaken several initiatives to enhance its oversight of those markets: 1) Increasing Information and Transparency; 2) Ensuring Proper Market Controls; 3) Continuing Aggressive Enforcement Efforts; 4) Improving Oversight Coordination; and 5) Seeking Increased Funding.

- **Proper oversight of markets requires transparency. The CFTC must receive the information it needs to conduct market surveillance, and it must have the technology necessary for its staff to review and react to that information.**
- **The futures markets require appropriate market controls. This involves negotiating agreements with foreign regulators and foreign exchanges who seek to do business in the United States.**
- **Aggressive enforcement efforts are necessary to police the futures markets.**
- **The CFTC must engage with others in the Federal Government to ensure a proper understanding of developments in the commodity markets and related dynamics in the economy.**
- **The CFTC must receive increased funding to permit it to meet its regulatory oversight and enforcement obligations. It currently receives a fraction of the resources allocated to other financial regulators.**

The staff and Members of the CFTC are working extremely hard to fulfill the agency's mission to oversee the futures markets and to protect the public and market participants from manipulation, fraud, and abusive practices.

Written Testimony of
Acting Chairman Walter Lukken
Before the House Committee on Energy and Commerce
Subcommittee on Oversight and Investigations
June 23, 2008

Mr. Chairman and Members of the Subcommittee, thank you for inviting me to testify before this Committee on the role, responsibilities, and resources of the Commodity Futures Trading Commission (Commission or CFTC).

During the last few years, the futures markets have changed dramatically in size and complexity, experiencing 500 percent growth in both volume and products listed. Once member-owned and dominated by open-outcry trading, today exchanges are technology-driven corporations that primarily trade electronically, 24 hours a day, all around the globe. Approximately $5 trillion of notional transactions flow through these U.S. exchanges and clearing houses daily. This description alone would make the oversight of these markets a challenge for regulators. But add to it the sub-prime crisis, record energy and agricultural commodity prices, the influx of financial funds in futures, and historic low staffing levels at the CFTC, and it is clear that these are challenging times for this agency.

Recent substantial increases in the price of crude oil and other commodities have had a significant impact on American consumers and have put considerable strain on U.S. households. These issues are a matter of intense focus at the Commission due to the key role that futures markets play in the price discovery process. The CFTC shares the concerns of Americans and Congress, and we are committed to ensuring that our nation's futures markets operate fairly and efficiently, and that the prices of commodities, including crude oil, are determined by the fundamental forces of supply and demand, rather than abusive or manipulative practices.

The CFTC recognizes that these markets and their participants have evolved significantly in the last several years. Concerns have been raised recently regarding the role of speculators and index traders in the commodity markets. As prices have escalated, the CFTC has pursued an active agenda to ensure that the commodity futures markets are operating free of distortion as the agency looks to better understand the implications of these structural market developments. The Commission has undertaken several initiatives directed to enhancing the oversight of the energy and agricultural markets. These initiatives fall into five broad categories: 1) Increasing Information and Transparency, 2) Ensuring Proper Market Controls, 3) Continuing Aggressive Enforcement Efforts, 4) Improving Oversight Coordination, and 5) Seeking Increased Funding.

1) Enhancing Information and Transparency.

The proper oversight of markets requires transparency. Market regulators must receive the necessary information to conduct surveillance of market activity, study long-term financial trends, and evaluate policy changes as circumstances evolve. The backbone of the CFTC's market surveillance program is the large trader reporting system, through which the CFTC receives daily data showing all large traders' futures and options positions in the markets. This information enables the CFTC's surveillance economists to oversee all traders of size to ensure that no one is attempting to manipulate the futures markets. This amount and detail of trade data collected and analyzed at the CFTC is unprecedented among financial regulatory agencies.

As markets have become electronic and global, the CFTC has been working to expand and enhance its technology and trade data collection to accommodate these trends. Last spring, the CFTC announced a major technology purchase that will modernize our trade practice surveillance system to enhance basic trade surveillance and permit nearly real-time analyses of all trading activity. Investments in technology are critical for the CFTC to sort through the millions of pieces of information generated by these electronic markets daily.

The CFTC is also working to increase the amount and quality of the trader data we receive from the markets. In late May, the CFTC announced an agreement with the U.K. Financial Services Authority (FSA) to expand the trader data received from ICE Futures Europe on its cash-settled light sweet crude oil contract that settles off the NYMEX benchmark crude oil contract. When first listed in 2006, this linkage between the two contracts caused the Commission and its surveillance staff to be concerned that regulators would not be able to observe the entirety of a trader's position in both markets. Once the surveillance issue was identified, the CFTC worked with its foreign counterpart, the FSA, to share large trader data for these linked contracts to ensure that traders were not gaming one market to influence the other. At that time, the CFTC's agreement with the FSA provided the CFTC with weekly trader information, and daily information in the final trading week, to facilitate the ability of the CFTC and FSA to oversee trading in these related contracts.

Building on these efforts, the CFTC and FSA two weeks ago announced an expanded information-sharing arrangement, including: 1) providing daily large trader positions in the linked ICE Futures Europe crude oil contract, 2) extending trader information sharing to all contract months, 3) a near-term commitment to improve the identification of market end users to be completed within two months, 4) improved formatting so trading information can be seamlessly integrated into the CFTC's surveillance system, and 5) CFTC notification when traders exceed NYMEX position accountability levels. This cross-border information sharing is unprecedented among global regulators.

The CFTC also has taken action to improve the transparency of index traders and swap dealers in the energy markets. There is public concern about the amount of index money flowing into the futures markets. Pensions, endowments, and other long-term investors increasingly are investing a portion of their portfolios in a broad mix of commodities in order to diversify their holdings and reduce volatility and risk. Unlike traditional speculative trading by hedge funds and other managed money, index investors are typically non-leveraged entities utilizing a long-term buy–and-hold strategy. Most of this type of investment comes through major Wall Street swap dealers that sell their clients broad exposure to the commodity markets through an over-the-counter commodity index contract. Swap dealers then are exposed to commodity price risk as a result of aggregating these transactions and must utilize the futures markets to manage their own remaining residual risk. This "netting out" of risk by swap dealers before coming to the futures markets makes it difficult for regulators to determine the total amount of index trading occurring in the energy markets.

As a result, the Commission decided to issue special calls for information about commodity index trading, principally to swap dealers through whom most of this trading takes place in the over-the-counter (OTC) market. Some market commentary has pointed to long-only index trading as part of the reason for the sharp increases in energy prices. Through its large trader reporting system, the Commission has highly accurate information on all swap dealer positions in all regulated U.S. futures markets, including energy futures markets. However, swap dealers' futures positions can represent hedges of very complex "books" of many different types of OTC derivative and cash transactions. Therefore, swap dealers' futures positions do not necessarily correspond accurately with the amount of index trading that is occurring in the OTC market. In order to better understand the extent and possible impact of index trading, the Commission has issued special calls to swap dealers requiring them to provide information on commodity index transactions.

After analyzing this data, the Commission and its staff will provide a report to Congress by September 15, 2008 regarding the scope of commodity index trading in the futures markets and recommendations for improved practices and controls, should they be required.

2) Ensuring Proper Market Controls.

Last fall, the Commission announced its intention to address the mounting regulatory concerns surrounding exempt commercial markets that trade over-the-counter energy products. The Commission held a public hearing and worked with Congress to enact legislation as part of the Farm Bill requiring exempt commercial markets that trade contracts linked to regulated U.S. futures contracts to provide the CFTC with large trader reports and impose position and accountability limits on such products. Congress and this agency believed that these authorities were necessary to protect the regulated energy marketplace.

As noted earlier, linkages between contracts are not purely a domestic occurrence but also happen across international borders. Most energy and agricultural commodities are global commodities operating in a global marketplace, and the U.S. futures markets have been facing the challenges of cross-border trading and regulation for many years.

For more than a decade, the CFTC has worked to develop international regulatory networks, to increase international cooperation, and – most importantly – to maintain and improve oversight of U.S. futures markets in the face of increasing globalization. Over the years, the CFTC has developed a mutual recognition process that strikes the balance between the need for U.S. regulators to maintain confidence in the functioning and integrity of our markets, and the acknowledgement that the increased globalization of commodity markets requires international cooperation and coordination.

With this balance in mind, the CFTC last week announced modifications to its Foreign Board of Trade process. After consultation with the British FSA, the CFTC conditioned ICE Futures Europe's direct access to U.S. customers on implementation of position and accountability limits on its linked crude oil contract. In addition, ICE Futures Europe will adopt hedge exemption requirements similar to those in the U.S. and report any violations of those requirements to the CFTC. The CFTC has amended ICE Futures Europe's direct access letter to reflect this change. The CFTC will also require other foreign exchanges that seek such direct access to provide the CFTC with comparable large trader reports and to impose comparable position and accountability limits for any products linked with U.S. regulated futures contracts. This combination of enhanced information data and additional market controls will help the CFTC in its surveillance of its regulated domestic exchanges while preserving the benefits of a mutual recognition program that has enabled proper global oversight over the last decade.

The amended direct access letter also formalizes the recently announced information-sharing agreement between the CFTC and the FSA by requiring ICE Futures Europe to provide the CFTC with detailed market information, equivalent to U.S. standards for market surveillance, as a condition of receiving direct access to U.S. customers. The CFTC will incorporate this new data into the CFTC's Commitments of Traders Report, which is a weekly report categorizing traders and positions.

The Commission's staff intends to apply these new direct access conditions to any future requests by foreign exchanges for direct access to U.S. customers, where the exchange in question lists a contract that settles against contracts listed on any U.S. exchange. These revisions to the foreign board of trade program will provide the CFTC with additional oversight tools to monitor linked contracts. This combination of enhanced trading data and additional market controls will help the CFTC in its surveillance of regulated domestic exchanges, while preserving the benefits of our international mutual recognition program, which has permitted cross-border oversight of global markets over the last decade.

3) Continuing Aggressive Enforcement Efforts.

During these turbulent market conditions for crude oil, the environment is ripe for those wanting to illegally manipulate the markets and, as a result, the Commission has stepped up its already aggressive enforcement presence. In late May, the Commission took the extraordinary step of disclosing that in December 2007, its Division of Enforcement launched a nationwide crude oil investigation into practices surrounding the purchase, transportation, storage, and trading of crude oil and related derivatives contracts. Although the Commission conducts its enforcement investigations in full confidentiality, today's unprecedented market conditions and the desire to maintain public confidence justified disclosing the existence of this investigation.

Since December 2002 to the present time, the Commission has filed a total of 39 enforcement actions charging a total of 64 defendants with violations involving the energy markets. The agency has assessed almost half a billion dollars in civil monetary penalties in settlement of these enforcement actions. The Commission also has achieved great success in this area by working cooperatively with the Department of Justice on over 35 criminal actions concerning energy market misconduct. Strong enforcement is imperative during this time.

4) Improving Oversight Coordination.

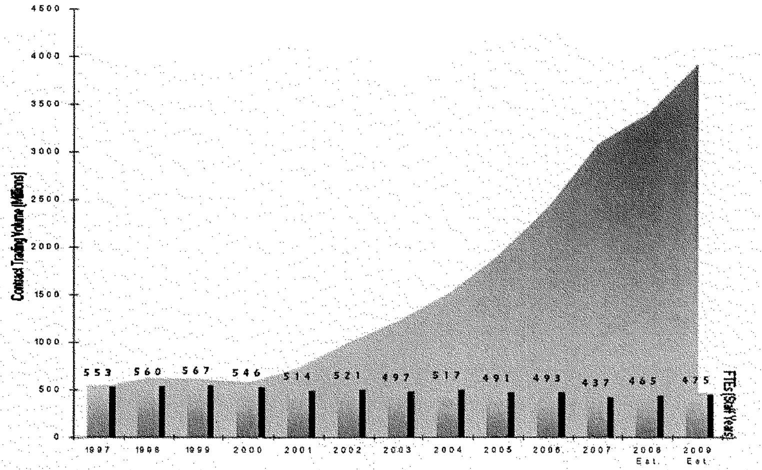
Given the CFTC's size and the enormity of the global marketplace, the CFTC must engage others in government as we seek to meet our important mission. Last week, the CFTC announced the formation of a CFTC-led interagency task force to evaluate developments in the commodity markets. The task force – which includes staff representatives from the CFTC, Federal Reserve, Department of the Treasury, Securities and Exchange Commission, Department of Energy, and Department of Agriculture – is examining investor practices, fundamental supply and demand factors, and the role of speculators and index traders in the commodity markets. It is intended to bring together the best and brightest minds in government to aid public and regulatory understanding of the forces that are affecting the functioning of these markets. We convened the first meeting last week and will strive to complete this work quickly and make public the results.

The CFTC also recently hosted its second international enforcement conference – a two day event focusing on global trading in the energy markets with senior enforcement officials from 10 countries. Our goal was to enhance the ability of the CFTC and its fellow regulators to detect and deter misconduct affecting commodity prices in the energy sector, and I am confident that it was a success that will bear the fruit of coordinated international enforcement for manipulation.

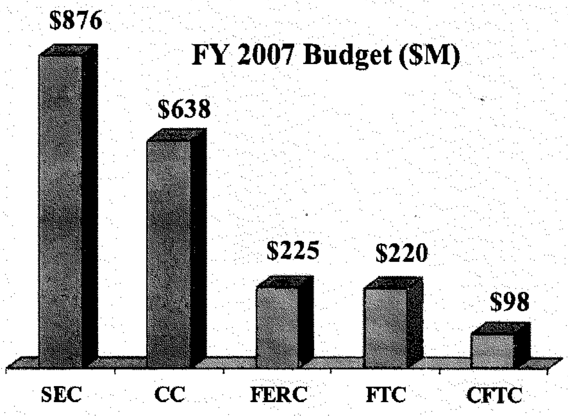
5) Seeking Increased Funding.

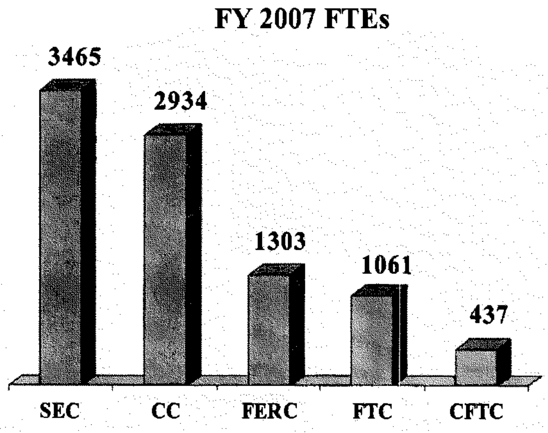
If the CFTC sounds busy, it is—especially given that the agency's staffing levels are near record low numbers. Since the CFTC opened its doors 33 years ago, the volume on futures exchanges has grown 8,000 percent while the CFTC's staffing numbers have fallen 12 percent. The following chart shows the exponential growth in contract volume, compared to CFTC staff numbers.

Growth in Volume of Futures & Option Contracts Traded
& CFTC Staffing Levels



The CFTC's resources simply have not kept pace with the growth of the markets and the growth of similar financial regulators. As you can see, the CFTC lags other comparable agencies in funding levels by substantial margins. This agency's lack of funding over the course of many years has had a negative impact on our staffing situation, rendering it unsustainable for the long run.





The CFTC is a small agency doing an extraordinary job under difficult circumstances. The dedicated and skilled individuals at the CFTC are working tirelessly to ensure the integrity of the markets. However, as the agency embarks on new authorities and initiatives in order to respond to changing market conditions, it is imperative that the CFTC receive additional funding.

The CFTC is in the midst of implementing its new Farm Bill authorities, which require many programmatic changes and plain old hard work from a staff that is already under significant strain. Additionally, the agency's staff is racing to implement the many recent agency initiatives I outlined earlier in my testimony. Recall as well that our employees are also full-time regulators, charged with overseeing these markets each and every day, upholding the agency mission to safeguard the futures markets. Given our staffing numbers, the agency is working beyond its steady state capacity and is unable to sustain the current situation for much longer without being forced to make Hobson's choices about which critical projects should be completed and which ones will be delayed. And while we welcome discussions of any appropriate and necessary legislative or agency changes, our agency is clearly unable to accommodate additional tasks at our current resource and personnel level.

Last Tuesday, I testified at a joint hearing of the Senate Appropriations and Agriculture Committees to support the Commission's request for additional appropriations from Congress.

In making this request, the Commission was mindful of the need to maintain fiscal restraint in appropriations and the competing needs of other parts of the Federal Government. However, we believe that the proposed funding level of $157,000,000 is the appropriate level of resources required to fulfill our immediate responsibilities. The increase will restore staffing to a level last sustained almost two decades ago when market volume, innovation, and complexity were significantly less than today and when the agency did not yet have to face the expanded workload brought on by globalization of the marketplace and the emergence and widespread use of derivatives and hedge funds. This of course means the Commission is now doing much more with less and continues to deliver a good return on investment for the American taxpayer. The Commission's ratio of workload to resources has always been lean compared to other financial regulators. But we have reached our limit and cannot uphold our mission without immediate additional resources.

In summary, I want to thank the Committee for inviting me to testify today. The Commission shares the Committee's concern for current conditions in the energy markets and for the effects of high crude oil and gas prices on American consumers, workers, and businesses. These are difficult times in the futures markets, and the Commission recognizes the need to respond accordingly. As I stated in my earlier testimony – and it bears repeating given the challenges of the last several weeks – I am deeply proud of our highly skilled and productive staff. This small Federal agency is working hard to protect the public and the market users from manipulation, fraud, and abusive practices in order to ensure that the futures markets are working properly.

Thank you for the opportunity to appear before you today on behalf of the CFTC. I would be happy to answer any questions you may have.

Mr. STUPAK. Thank you. And thank you for your testimony.

This is our second hearing, and we are already talking about a third hearing. The changes in the Farm Bill—we're going to make sure the oversight role of this committee is done, especially when it comes to energy. And, as I think you'll see this week, there will be other pieces of legislation on the floor to try to take away speculation.

Let me ask you this, if you may, because our last hearing was on December 12th, and apparently the CFTC has reversed its position, in that you will now, even though you didn't do it in December, but now you indicated that you will require the same position limits and accountability levels which apply to U.S. markets to apply to ICE Futures in the U.K.

Is that correct?

Mr. LUKKEN. That is correct.

Mr. STUPAK. OK. Is the CFTC going to require the positions taken on both exchanges be added together when the exchange assesses compliance? For example, can a trader hold a maximum limit on both exchanges, or will they be able to double that limit by trading on two different places?

Mr. LUKKEN. Each exchange would set its own limits.

Mr. STUPAK. So it's not the aggregate; each exchange could have its own limits, right?

Mr. LUKKEN. That is correct.

Mr. STUPAK. OK. Are there, what, 18 different exchanges?

Mr. LUKKEN. Trading crude oil? West Texas——

Mr. STUPAK. Right.

Mr. LUKKEN. There's two currently. There's the London market, and there is the NYMEX market.

Mr. STUPAK. OK. What about Dubai? Are they going to be trading on Dubai?

Mr. LUKKEN. Dubai does not list West Texas—the Dubai Mercantile Exchange, which has an access letter with the CFTC, has not listed the West Texas Intermediate contract. There is the Dubai Gold and Commodity Exchange, which has no relationship to the CFTC. There's no access letter that we've granted them. They do have a West Texas contract. It's about 12,000 contracts volume in June.

Mr. STUPAK. And you expect that to go up, do you not, since there has recently been some action on NYMEX being allowed to trade on Dubai?

Mr. LUKKEN. Well, again, if the Dubai Mercantile Exchange would have large trader reporting and the imposition of position limits, that exchange that has the access letter with us would be subject to position limits.

Mr. STUPAK. OK. So every exchange I have, whatever position limit that is, that's what I can trade up to; that position, correct?

Mr. LUKKEN. That's correct.

Mr. STUPAK. OK. Turn to tab 14 in the book there right there in front of you. That's our exhibit book. This is a chart which shows that 64 percent of the trading for the West Texas crude oil contract on ICE Futures Exchange originates in the U.S. during 2007.

So my question is, if a foreign board of trade consistently has a majority of its trade originating in the United States, why shouldn't that foreign board of trade be subject to CFTC regulation and register as a designated contract market?

Mr. LUKKEN. Actually, these figures, I'll have to—ICE can talk about these figures as well, but these also include, as U.S. trades, trades that are happening both U.S. and overseas. So, actually, if you just look at those that originate here in the U.S. and you break it down by size, it's about 45 percent of the market.

But having said that, even at 45 percent, I think your question holds valid, which is, why should we not try to impose U.S. regulatory structure on these markets? I think, for us, we recognize that these are global markets, that the ICE exchange has been in existence for 25 years, regulated by the FSA, and that we have to recognize that there are certain things we can condition, information and controls that are important——

Mr. STUPAK. Why can't you hold these exchanges to the same rules and regulations that you do NYMEX? Again, tab 14, you say 45 percent, I'm looking at volume from all terminals, volumes from U.S. terminal, percentage from U.S. terminal, 64.1 percent. Why wouldn't they come under the same regulation? Sixty-four percent of the trades are here in the United States.

Mr. LUKKEN. Again, this is something the Commission looked at in 2006 and held public hearings on this, went out in public record, trying to get comments about this. And our recognition process allows us to recognize foreign regulators as the home-country regulator but then condition these on important——

Mr. STUPAK. I agree. But the question was, why shouldn't foreign board of trades be subject to CFTC regulation and register as a designated contract market?

I know all the reasons why you made these changes. But why shouldn't they be the same, especially when 64 percent of the trades are occurring here in the United States?

Mr. LUKKEN. Well, certainly Congress could make the choice to get rid of our program, but that's not going to stop trades from happening overseas.

Mr. STUPAK. No, it won't stop trades, but won't it bring transparency? We'll know who's trading, how many contracts they're holding, what the price is. Isn't that what we're trying do here?

Mr. LUKKEN. Well, that's correct. And our program has allowed us to see the transparency on these markets. We see not only U.S. participants on ICE, but we also see the two-thirds of those participants, according to open interest, of the foreign participants. So we're seeing not only U.S. participation——

Mr. STUPAK. But if you're seeing all that, why did you have to put out the special call then for information?

Mr. LUKKEN. That's for swaps.

Mr. STUPAK. I know that's for swaps, so you don't see the swaps. In the testimony earlier today, most of them showed that swaps is a major problem here.

Mr. LUKKEN. Right, and that is something that the agency, about a month ago, asked for more data about swaps. Typically, swaps are aggregators in our markets. They bring multiple positions to the markets. They have clients, such as—Morgan Stanley, I think, openly talks about having the airline industry as their client. Southwest was mentioned, as well.

These businesses bring all this to the futures markets, where they manage their risk. And so that's typically, we just look to what the swap dealers are bringing. We don't look beyond to who their clients are. But that's the information we're going to get. Come September 15th, we hope to provide Congress with more information about what swap dealers are doing in these markets.

Mr. STUPAK. You know, I'm looking at a June 18th Bloomberg article quoted that the CFTC's head of enforcement, Mr. Gregory Mocek, is saying that, "At this time, we have no evidence that speculation in ICE in Western Texas Intermediate crude contracts are manipulating the markets." Secretary Bodman basically said the same thing. Secretary Paulson has pretty much said the same thing too.

But do you think it's reasonable for the head of your enforcement to be making such claims during an open investigation when you put out a special call trying to get the information? It sounds like you already predetermined before you got the information that there is no speculation or manipulation going on.

Mr. LUKKEN. Well, manipulation is a different term, and I'd like to clarify. Our act defines manipulation as somebody intentionally trying to come into the market to their own advantage, collaboratively with a group, to benefit for profit. And we've seen this in cases, famous cases that this committee is well aware of, including Amaranth and those types of cases.

I think what's being discussed currently is that there may be so much financial money coming into the markets that it may be artificially creating a bubble. That is something different, typically, than what we look at. So we can never rule out definitively that manipulation is not happening, because that's what we do, we police the markets, just as policemen police for crime. They can't prevent it all. But when they do, they go after it aggressively.

And that's what I think our enforcement director was saying, is we have not seen that ICE is causing a part of this bubble that's going up. But we can't ever rule out that manipulation is not occurring anywhere.

Mr. STUPAK. But having been a police officer, you do get a sense that something is going on, and you start digging a little bit.

So let me ask you this. Excessive speculation is prohibited by the Commodities Exchange Act. However, a certain amount of speculation in the markets is necessary to provide liquidity.

What concerns me is the increasing level of speculative money purchasing oil futures contracts. So what would you consider excessive speculation?

Mr. LUKKEN. Well, it's something—as you mentioned, I think your chart had 70 percent. Those are figures, a lot of that growth is the swap dealers, trying to figure out what the swap dealers are doing. So that's what we need more information on, greater detailed information.

We've sent out our special calls to get that, to find out how much of that business—a lot of it may be commercial. And, in fact, I think I've passed out a chart to the committee members, swap dealers are currently flat the market or virtually flat the market. They have as many short positions, meaning they would benefit from the prices going down, as they do long positions.

So you would think, if all this index money was overtaking these markets, that you would see more on the long side. But right now—and this has been studied for a long period of time—swap dealers have actually had as many short positions as long positions in the market.

Mr. STUPAK. Sure. There is your chart there, the one you passed out to the committee today. We just had a chance to take a look at it.

But isn't this argument really, sort of, flawed? I mean, the law of supply and demand is still in effect, and new demand in any market forces prices higher to attract new sellers. So there's a parallel shift up in price every time an index buyer buys or holds. So a new entrance and the exit point is higher than if there were no large index buyer in the market. So every time you roll one of these over and take a new one, the price is higher.

As you can see, nearby future prices, look at that, they shot right up on there. Sure, it stays pretty much the same; you want to say it's flat. But look at what it has done to the price, because it's a new contract. Every time it says short and long, it's a new contract; therefore, the price has to go up, because the flow of money into this market, which is unreasonable, that led to excess speculation.

Wouldn't you agree?

Mr. LUKKEN. Well, as you mentioned, there is a short for every long. So there is somebody that will lose for every winner. So that's important to remember. And——

Mr. STUPAK. As long as those prices continue to go, we continue to drive the floor up each time we make one of those.

Mr. LUKKEN. Right.

Mr. STUPAK. No matter where it occurs.

Mr. LUKKEN. Yes, well, I think what this chart—we can't make any hard and fast conclusions with this chart, but it does indicate that it's worth the effort that we're going through to get the information from these swap dealers, to use this interagency task force to look at this. We have DOE and FERC and FTC and others looking at this information with us, so that we can make sound, informed decisions.

Mr. STUPAK. Well, I agree with you, but I think your chart disproves what you're trying to say. And as I said earlier, Secretary Paulson, after you issued your special call, 3 days later he says, and I quote, "My position, and I've looked at this very carefully, is I don't believe financial investors are responsible for any significant degree of this price movement. This is supply and demand. Financial investors are on both sides of the market. They are long, they are short. They don't set trends. They follow trends."

A fair reading seems to me that the Secretary has apparently rushed to judgment. And I don't know if your interagency task force you've been talking about or your special call is going to change the Secretary's mind. Sounds like he has made up his mind before we ever even had any information come forth.

Mr. LUKKEN. Well, as an independent regulatory agency, we have to keep an open mind and evolve with circumstances. And that's why we're trying to get the better information. I think everybody has agreed that more information is needed on these swap dealers, and that's what we're going to do.

Mr. STUPAK. Very good.

Mr. Whitfield for questions, please.

Mr. WHITFIELD. Chairman Lukken, thank you very much for being with us today.

And, obviously, we all come to this from different viewpoints. As Members of Congress, we're primarily focused on what can we do to get these prices down and help our economy and help people who are trying to meet all their financial obligations and so forth. And from your perspective, you're enforcing laws and regulations as they relate to trading in the commodity futures market.

And I know Chairman Stupak had mentioned Secretary Bodman's—he had made a comment that he didn't feel like speculators were affecting the price. And your chief economist, I guess, Jeffrey Harris, in the Senate last month said that there was no evidence that position changes by speculators precede price changes for crude oil futures contracts. And without getting into the argument, the first panel all felt like, yes, it's having a dramatic impact.

What specific authority do you have today to penalize someone or take some action if it's determined that there is excessive speculation?

Mr. LUKKEN. Well, excessive speculation is not defined in our act. It talks about it's something that the CFTC should look for and ensure that unwarranted price changes are not occurring, and artificial prices. And it asks us to set speculative limits in order to do that.

We do have a core principle in our act that requires exchanges to set position limits, as well as accountability levels, for those contracts. And they do that, and have been doing that since 2000, since our act was modernized.

So excessive speculation is, like I said, an undefined term. But we do have controls in place, mainly through the information——

Mr. WHITFIELD. Let me just interject for a moment. Even though it's not defined, with the dramatic increase of oil futures market, I'm supposing that within the industry there has been some discussion about what is excessive speculation, correct?

Mr. LUKKEN. Yes, sir.

Mr. WHITFIELD. And what did you all determine? Did you come up with any conclusion of what excessive speculation is as it relates specifically to this problem of oil futures?

Mr. LUKKEN. Again, we have not defined excessive speculation, but we certainly have been taking action over the last year to try to address some of the concerns around speculators, including closing the Enron loophole as part of the Farm Bill, looking into swap dealers as part of our recent special call——

Mr. WHITFIELD. You listed a number of initiatives that you had taken. And so you can do most of these by regulation, or do some of them require legislation?

Mr. LUKKEN. Well, the Enron loophole required legislation in the Farm Bill. So we're implementing that according to a timetable set out by Congress.

The swap dealer information, we're trying to see what that information may bear on what the situation is. But we may or may not have to require certain legislative changes; I don't know yet.

Mr. WHITFIELD. What about margin requirements?

Mr. LUKKEN. The CFTC does not have specific margin authority except for in emergency situations. It's set by exchanges.

I would like to address the margin question. Margin in the futures market is different than in the stock markets. It is not a downpayment on a good, such as in the securities market. It's meant to cover a 1-day price change. And it's been successfully doing that to prevent systemic risk in the futures markets for 150 years.

Mr. WHITFIELD. So you would oppose changing the margin requirements?

Mr. LUKKEN. I think it would not result in what everybody's looking for, which is lower prices. I think it may drive businesses elsewhere, to London and to the over-the-counter markets. That should be a concern.

And I'd also mention, if people are concerned about index traders, those people are normally holding a dollar of asset for the positions they are putting up. So they could meet those margin calls. And I'm not sure it would get them out of the market, if that's what the concern of Congress was.

Mr. WHITFIELD. Now, in the farm bill, what else did it do to assist you, other than addressing the Enron issue?

Mr. LUKKEN. Well, we also had increased penalty authorities for manipulation, which is very helpful. This puts us in line with FERC, to ensure that it's enough of a punishment for people trying to manipulate the markets.

We also received some greater retail fraud authority for foreign currency fraud, which was helpful.

So there are a few provisions in there that helped give us greater tools at the agency.

Mr. WHITFIELD. OK.

Well, thank you very much.

Mr. STUPAK. Mr. Melancon for questions.

Mr. MELANCON. Thank you, Mr. Chairman.

Mr. Lukken, when was it that the CFTC started looking into the swap issue? How long ago was that?

Mr. LUKKEN. Well, obviously, we always have the ability, and have over time during surveillance of our markets, to be able to ask for swap dealer information using our 1805 authority. And that occurs quite frequently.

As a structural issue of trying to get information as a class, this is something we've started thinking about as prices have been escalating, as concerns have been raised in the public about this, that we probably need to find out more information about the underlying transactions.

Mr. MELANCON. So a month ago, 3 months ago, 6 months ago, a year ago?

Mr. LUKKEN. Yes, these are things that, yes, we've been debating internally, sure.

Mr. MELANCON. About when? About 6 months ago? A year ago?

Mr. LUKKEN. Yes, certainly.

Mr. MELANCON. Now, did the Congress ask you to look into this, or did you on your own over at the CFTC take the initiative?

Mr. LUKKEN. This is something CFTC did on its own.

Mr. MELANCON. OK. And you're setting a date for September, yet the prices are escalating at a rate that September is going to be too late, if I read it correctly. I know government doesn't work that fast, but is there any way to expedite the work you're doing?

Mr. LUKKEN. Well, we said by September 15th, so if we can get it and make recommendations before then, we certainly will.

Mr. MELANCON. I have never seen an agency beat a deadline.

Mr. LUKKEN. Well, we'll give it our best.

Mr. MELANCON. Yes. Who exactly is ICE? I mean, I know they're a brokerage firm. I know they're based out of England. I know they have an office in Atlanta. But who are they? Who are the principals?

Mr. LUKKEN. The principals?

Mr. MELANCON. Yes, who set ICE up? Is it an American company involved in this that didn't like the way that things were regulated by——

Mr. LUKKEN. The holding company I think is based in Atlanta, but they bought a British company several years back.

Mr. MELANCON. So who is "they" in Atlanta?

Mr. LUKKEN. I think by British law it has to be an independent board. This is something that I think your next panel could talk about.

Mr. MELANCON. Yes, but who is "they" in Atlanta? Who are the "they" that set up the ICE?

Mr. LUKKEN. I don't know the exact individuals. I think their CEO is Jeffrey Sprecher. But they are the ones that bought the IPE in London.

Mr. MELANCON. So they were investors that put this together? Is that basically how it got started in Atlanta? And how long ago was that? Two years ago? Three?

Mr. LUKKEN. I think it was in the early 2000s that ICE came into formation.

Mr. MELANCON. So when the CFTC made some changes to the way they do business and the way swaps and derivatives are handled, who came and asked the board for that? Who specifically came and said, "We need to make these changes because"?

Mr. LUKKEN. Well, the policy regarding swaps has been a policy since 1991, so that predates myself. But the swaps exemption has been in place since that time.

Foreign boards of trade, again, this is something that we dealt with in a public hearing and, in the Federal Register, put these issues out for comment.

So some of these things pre-date the Commission.

Mr. MELANCON. So when did the changes take place?

Mr. LUKKEN. Which changes?

Mr. MELANCON. The changes in the way we regulate the market, the commodity market? I mean, I know over 2 years ago it was brought to my attention. And so I'm just wondering when we started this—I guess, when did we start this allowing for the escalation by changing the rules of how we ran the market?

Mr. LUKKEN. Right. Well, ICE Europe, which was the former IPE, had been in existence and trading in the United States since the CFTC granted it an access letter in 1999. 2006 is when I think our surveillance economists became concerned that, because they were linking to NYMEX, that they could potentially move the markets. And that's when we conditioned it on information-sharing between the London exchange and the New York—or the CFTC was getting this information about the large traders in those markets.

Since that period of time, we've worked to improve the information we get, and most recently imposing position limits. And so we feel that we've harmonized those positions and the policies of what's happening here in the United States to make the equivalent of what they're doing in Britain.

Mr. MELANCON. So ICE only deals with energy, only deals with oil? Or do they have other commodities?

Mr. LUKKEN. I think they are primarily in the energy business, yes.

Mr. MELANCON. OK. But if I were a commodity market, NYMEX, CBOT, wouldn't I want to trade in all commodities?

Mr. LUKKEN. Well, actually, let me correct myself. They also own a fully regulated exchange, the NYBOT, the New York Board of Trade, which they have subsequently changed to ICE U.S. But they trade coffee, sugar, cocoa, other commodities, fully regulated commodities in the United States.

Mr. MELANCON. I came from the sugar industry. I haven't seen the price going up on there. What's the deal with them? They don't want to speculate on that?

Mr. LUKKEN. I don't know.

Mr. MELANCON. We'd like to see some speculation in the sugar business.

I think my time has just about run out.

But I would encourage you to expedite the report if you would, please, sir. As you're aware, at $4 a gallon, it is getting tougher and tougher to explain to constituents exactly what the problems are out there.

Thank you, Mr. Chairman.

Thank you, Mr. Lukken.

Mr. STUPAK. Thank you, Mr. Melancon.

Mr. Barton for questions please.

Mr. BARTON. Thank you, Mr. Chairman.

First, I want to commend you for protecting some of the actions the CFTC has taken in the last several weeks. They mirror, if not exactly at least closely, the bill 6130 that I put in, along with a number of other members on the Republican side of this committee. So we're glad to see some actions beginning to be taken.

My first question goes to the heart of why you're here. Assuming that there is a problem in the markets in terms of speculation in the oil futures market, and it would seem to me we have to address the underlying supply and demand fundamentals, or no matter what we do on speculation, it isn't going to make much difference if we don't get more supply or less demand or a combination of both fundamentally in the world market.

But having said that, I do think there is something we can do on speculation. My biggest concern beyond what to do is how to make it congruent with the foreign markets. Our first panel seemed pretty satisfied that if we did it in the United States, that Europe would follow our lead, and I guess Asia, also.

Do you share that belief that it's easy to make whatever we do, get the international markets to conform?

Mr. LUKKEN. Well, I think that's the worry, is there may be some retribution from foreign markets against U.S. exchanges trying to get access to foreign markets. So that's something I think we have to be mindful of. I think you still have to ensure that the information you're going to get is needed and necessary. And I think, as we've conditioned our access letters, that's what we've tried to get, is the large trader reports and impose position limits on these types of contracts. And that's going to be extraordinarily helpful.

But to require all these exchanges all around the world to come to register in the United States, it's going to be difficult and will require all our exchanges to go register all around the world with different regulatory authorities. So this ability to recognize each other around the world with good conditions, solid conditions, to ensure you're getting the right regulatory authority to police those markets, to see the entirety of it, is extremely useful.

And like I said, if we got rid of our program tomorrow, the London market would not go away. We would just stop seeing it. That's the problem. We want to make sure that we see it. And the leverage we have is through this access letter.

Mr. BARTON. Well, let's bring—one of the recommendations of Mr. Masters I believe was to raise the margin requirement. Right now, we let the commodities markets set their own margin requirements. We don't have a requirement like we have in the equity market that if you buy a stock, you've got to put up 50 percent of the value of the stock the day you buy it, or I think within 3 days or maybe 5 days.

Let's assume that, either by statute or by regulation, we raise the margin to 25 percent of a commodity of an oil futures contract. Would ICE go along with that? I would think they would say, well, if they're at 25, we're going to be at 10, or we want to get our business—we want to get their business. So, I mean, that's one example where it's going to be very difficult I would think.

Mr. LUKKEN. I think that's right. I think that's very right.

Mr. BARTON. What about the transparency requirements on position limits? If we set more transparency requirements or if we end some of these exemptions and require real enforcement on limits, what would the ICE market do about that?

Mr. LUKKEN. I think transparency, this is something we will get their data. We are going to put it in our commitment of trader data in the future, so the public will be able to see what's going on in ICE and commercial and noncommercial categories. So that's going to be helpful. And ICE has agreed to do that in the future along with the position limits and accountability limits.

Mr. BARTON. So we had one example on a natural gas company. When we cracked down in the United States on them, they just took their business, didn't change their position limits or anything, they just took it overseas.

Mr. LUKKEN. I think you have to be mindful of that, that's a possibility. But still on principle, you want to make sure the markets are being properly regulated. And so that's what we're trying to do, find that balance of get the information you need to properly surveil the markets but also not drive it into darker markets or elsewhere. That would be the worst scenario that we could probably hope for.

Mr. BARTON. Do you agree that, because of the stability of the financial market in both the United States and in Great Britain, that there's not much concern about a third market being created outside of that framework overseas and that people just aren't going to put their money in Dubai or Hong Kong or someplace like that?

Mr. LUKKEN. I think futures markets, they don't move very often, so London and New York are probably the two markets. But they could. There's a big over-the-counter market that could exist elsewhere outside the U.S.'s surveillance. So that may happen as well. But no, I think there are financial centers around the world that would try to use this to their advantage: Tokyo and Hong Kong and others.

Mr. BARTON. And my last question, Mr. Chairman.

Do you agree that it's possible to have different rules for physical participants in the market, i.e., they actually sell the product or they actually want to take ownership of it; and different rules for nonphysical, they're in it purely for financial purposes without the expectation of receiving or providing the product?

Mr. LUKKEN. Yes, and we do under current law. I mean, speculators are required to have certain limits on what they can do. So the question is, again, how do you ensure that you have enough speculators to bring proper liquidity, define prices, discover those prices, but not dry them out. So the commercials have difficulty either finding a seller for every buyer or a buyer for every seller. But also liquidity drives down prices for commercials as well as the bid and spread becomes higher. So that's useful, too. So we want to preserve that but ensure the controls are in place to ensure that nobody is artificially driving up prices.

Mr. BARTON. Thank you, Mr. Chairman.

Mr. MELANCON [presiding]. Thank you, Mr. Barton.

Mr. Green for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

And again, welcome Mr. Lukken.

The CFTC staff has issued no-action letters or foreign-board-of-trade exemptions which allow foreign boards of trade to operate in the U.S. without requiring these markets to register at the designated contract markets with the CFTC. How did these no-action letters come into existence, and was this process formally approved by the commission itself?

Mr. LUKKEN. This came into existence about 1996. Our act currently prohibits us from regulating foreign boards of trade. So it's difficult for us to put conditions on foreign boards of trade. So this access letter, the no-action letter that you have referenced, allowed us to have U.S. institutions that were seeking access with foreign exchanges to have access to those foreign exchanges under certain conditions. The CFTC staff does a thorough review of the regulatory systems of these different countries, as well as the exchanges itself before issuing these letters and then allows these institutions to trade foreign products.

Mr. GREEN. Do you agree with Dr. Greenberger's written testimony when he states that the no-action letter process never contemplated that an exchange owned by or affiliated with a U.S. entity would escape the CFTC regulation imposed on traditional exchanges?

Mr. LUKKEN. Well, this is when it was started in '96 and then I think formalized in 1999. Yes, there weren't any linked products at that time. However, in 2006, when this started, when the products did become linked, again, the CFTC held a public hearing, put out for public comment the changes that they were seeking, and we started asking for additional information from these markets.

Mr. GREEN. Do you know how many foreign exchanges have placed terminals within the U.S. pursuant to that no-action letter?

Mr. LUKKEN. I think it's around 20.

Mr. GREEN. Did the commission disclose its 2007 investigation and the practice surrounding the purchase and transportation of storage and trading of crude oil contracts?

Mr. LUKKEN. Yes, it did.

Mr. GREEN. What effect, if any, would this public announcement have made on this investigation of the contract market?

Mr. LUKKEN. Well, we felt, obviously, we never want to hinder an investigation either claiming charges against innocent parties until proven guilty, but because of and recognizing that there were concerns about manipulation in these markets, we took the extraordinary step of disclosing that we've been investigating this since 2007.

Mr. GREEN. Do you agree that oil has been transformed from a commodity into a financial asset where its prices are influenced by those investing in oil futures who are seeking a hedge against the weak dollar?

Mr. LUKKEN. Certainly our economists that look at this see the correlations between the dollar and commodity prices.

Mr. GREEN. Do you feel, as a matter of our economic policy, our government should allow commodities essential to the economy, such as oil, to be treated as a speculative asset for investors with hundreds of billions to allocate or should it be regulated in a way to ensure that its price is dictated exclusively by supply and demand?

Mr. LUKKEN. Our mission is to ensure that it's influenced by supply and demand, and that speculative interests are not artificially driving prices.

Mr. GREEN. On June 10th, CFTC announced that, in light of the rising crude oil price, it would convene an interagency task force, including the Treasury and Energy Department. This task force will look at the impact of the index traders and speculators. I know it's only a few weeks later, but has the task force met yet?

Mr. LUKKEN. We have met. We've tried to assign some of the things to different agencies. We will continue to meet. And hopefully, some of its findings can be a part of this report on September 15th.

Mr. GREEN. And you're still continuing to receive data on commodity index investments from the investment banks and funds pursuant to the special call for data issued on May 29?

Mr. LUKKEN. Are we receiving the data?

Mr. GREEN. Yes.

Mr. LUKKEN. I think we'll start receiving the data some time towards mid-July. We've sent out the request but have not gotten back the data yet.

Mr. GREEN. I appreciate your time. Thank you for appearing today.

Thank you, Mr. Chairman.

Mr. MELANCON. Thank you, Mr. Green.

Mr. Walden.

Mr. WALDEN. Thank you, Mr. Chairman.

Mr. Lukken, thank you for being here today.

Does the CFTC have the authority, do you have all the authority you need to go after somebody if they're on ICE or one of the other exchanges and adversely affecting our market?

Mr. LUKKEN. Well, if they're trading on ICE, and I would assume they're U.S. participants, we would certainly—that's an illegal act, and we can go after those U.S. participants for that, certainly.

Mr. WALDEN. So do you need any additional authority from us, from the Congress?

Mr. LUKKEN. For policing those, I think what's being considered is trying to codify some of the things that we've talked about. I think that would be helpful. And we're trying to think through whether we have the legal ability to go after all this. We certainly will advise this committee if we feel we're missing something.

Mr. WALDEN. And when would that advice come to this committee?

Mr. LUKKEN. As quickly as possible if we feel we need something.

But right now, part of this is we have the ultimate authority, which is to pull the no-action letter. So we can ensure—work with exchanges, work with the FSA, to get people out of positions. We can sue participants that are trying to manipulate the markets. So we have quite a few tools in this area.

Mr. WALDEN. There are a lot of folks, some of them who testified today, believe that market manipulation, not just speculation, is going on and could account for some say as much as $25, $35, $60 a barrel. What's your estimate?

Mr. LUKKEN. Well, I think certainly manipulation, illegal manipulation, somebody who is trying to control the market by holding a position, that, in our experience, has been a short-term effect. I mean, it's somebody able to hold a position at the expiration of a contract. And we've seen this very famously in Hunt Silver Crisis and with Amaranth, working off of two marketplaces to do that. But typically they can't hold those positions very long.

I think what people are concerned about is more of a structural effect, too much financial money. And that's something we're trying to get our arms around with this swap dealer special call authority. But as far as trying to estimate, it's difficult for me to know.

Mr. WALDEN. OK, and then you've heard the talk today about putting in different margin requirements. What's your recommendation to us with regard to margin requirements, especially in some of these trades?

Mr. LUKKEN. Well, I think margin is a pretty imprecise tool to try to go after the activity you're trying to go after. There are other ways to get it through transparency, in the controls I've talked about. But margin would raise the cost on some of these businesses significantly, could potentially move them to other markets like London or underground. Without—and I think the other concern for us is that these are meant, margin is meant to protect the clearinghouse. We want to make sure that that is a targeted protection. And if we start toying around with margin when prices are too high or too low, I'm not sure what sort of precedent that would set. But I think there are other ways to get at the type of controls that you're after.

Mr. WALDEN. And tell us about the OTC, the over-the-counter market and your regulatory authority toward that, those sorts of trades. Do you have much authority there?

Mr. LUKKEN. Well, right now, if there's a participant in our markets and we see an anomaly in their trading, we're able to reach through into over-the-counter market to get that data on a case-by-case basis and determine whether they're trying to use the over-the-counter market in conjunction with the futures markets to manipulate the price of a given commodity. So the over-the-counter market is a very large market. It's not necessarily a price discovery market like the futures markets have been and some even exempt commercial markets like ICE have become. So we try to only go into the over-the-counter market on a need-to-know basis and see what's going on, and it's been effective.

Mr. WALDEN. OK.

When it comes to these giant investment firms coming into the market, we read about the CalPERS, the California, I assume it's Public Employer Retirement System, coming in and weighing in with what, 4.5 percent or something of their wealth. What impact are you seeing as a result of that in the market, and where do these funds go in today's economy, but into the commodities?

Mr. LUKKEN. Well, I think everybody can agree that there's been an influx of financial money from pensions and endowments. They typically go through swap dealers, which we've talked about. Swap dealers are bringing a lot of business into the futures markets, including a lot of commercial businesses. So I'm not sure. I think, under the sort of portfolio diversification theory, commodities help improve the returns for these commodity pension, these pension organizations. I'm not sure there—I'm sure there are other assets they could go back to if Congress felt that they were somehow artificially driving up prices.

Mr. WALDEN. Now, some of the most vocal opponents of your organization and this administration have called for closing the so-called Enron loophole. That was done to a large extent in the Farm Bill, and some of those local advocates didn't bother to vote for the Farm Bill, which closed that loophole. Tell me, though, from your standpoint, the closing of that loophole, did that get done properly? Is there more work to get done there? Are there additional authorities that you need?

Mr. LUKKEN. I think it is going to be a very effective tool for us because our concern, as you know, our act requires us to protect the price discovery process wherever that may occur. So it may occur in a futures market, but it may occur in the over-the-counter market on these electronic exchanges. And so that's where we drew the line and said, that's when the public interest arises and we need additional authorities, is when price discovery begins to occur.

And so I think that has been a very effective way to think about this, is that we're going to protect the fully regulated marketplace, and these swap electronic marketplaces have become price discovery vehicles, and we're hopeful to get those authorities in place as quickly as possible.

Mr. WALDEN. All right.

Thank you, Mr. Chairman. Thank you.

Mr. STUPAK [presiding]. Mr. Burgess for questions.

Mr. BURGESS. Thank you Mr. Chairman.

Mr. Lukken, I assume you were here when the first panel testified this morning.

Mr. LUKKEN. I was.

Mr. BURGESS. Mr. Masters talked about his four-step plan to immediately bring the price of crude down to its marginal cost of $60 to $70; it could happen within a period of hours, minutes, days. Well, step one was, establish limits that apply to every market participant. And you heard testimony from other individuals on that first panel that this was probably where the most bang for the buck occurred in these four proposals, and this was the step of establishing position limits. Do you have currently the authority to do what is outlined by Mr. Masters in step one in his testimony?

Mr. LUKKEN. Putting position limits on speculators?

Mr. BURGESS. Yes.

Mr. LUKKEN. Currently, I think our act requires exchanges to put position limits on it. But I think through emergency authority, we could put position limits on any type of participant.

Mr. BURGESS. Well, again, the testimony we heard this morning was pretty powerful; that using this type of authority within a very brief period of time, we could bring the cost of crude oil to well under $100 a barrel. We see how the economy is suffering. We see how other commodity prices are affected. We heard the testimony from the truckers, the airline industry and on. Wouldn't that kind of classify as an emergency to take this step?

Mr. LUKKEN. Well, I think the big—we currently have controls and position limits on speculators, accountability levels outside the spot month for speculators. I think what was in that chart, the 70 percent chart that was shown, are the swap dealers, those people who are aggregating lots of clients and putting them into the futures markets, the net risk of those positions.

We're going to try to get better information from them, but we can't put limits on or think about limits until we get better data and information from those types of participants.

Again, we want to also make sure that if they're purposeful evading limits, that's something I think we should go after. But it could be that a lot of these are below limits or commercial participants coming to the markets. So we just need better data before making any hard and fast decisions about that.

Mr. BURGESS. OK.

Well, we had a hearing—and it probably wasn't as involved as this morning's has been—last December. How much more time? How much more data? What could we reasonably expect as a time line from the CFTC before you feel that you have the data you need to invoke those emergency provisions to bring the price of crude oil down by 50 percent?

Mr. LUKKEN. Well, certainly these are complex books that we're going through from swap dealers to try to unravel. These are not futures contracts. They are tailored contracts between customers and the swap dealers. So we're trying to put them in equivalent terms to the futures market, these billion dollar books of these organizations. So, again, we're a small staff trying to do this while we, at the same time, regulate the markets. So we're doing it as fast as we can to get to Congress the information they need to make decisions.

Mr. BURGESS. And I appreciate the conditions under which you work. It's just we hear people talk about opening the Strategic Petroleum Reserve, the President has executive authority to do that in times of emergency and that maybe this is one of those times. And I would just submit, if you have that authority under emergency provisions, that the step taken of limiting the spot market might be, or the speculators on the spot market may be a less drastic step than drawing down the Strategic Petroleum Reserve. We probably have a great reserve of speculators, but if we got into trouble after drawing down the Strategic Petroleum Reserve, we have nowhere else to go but ANWR, and we've heard it takes 10 years to get that oil.

Now, on the issue of just your ability to do your job, how do we stand currently with—you said you needed, what was the figure, you needed an additional $150 million this year? Did I see that in your testimony?

Mr. LUKKEN. No, actually an extra $30 million.

Mr. BURGESS. $30 million, OK. We'll give you $150.

But realistically what is the practical effect of the fact that we're just now starting our appropriations work in Congress, and no one will tell you with a straight face that we're going to finish any appropriations bill by September 30th, and anything that happens will be done after the next President is sworn in?

We're asking you to move with all due dispatch on this, and yet, at the same time, we're probably not going to fund you any additional money for at least 6 or 7 months and maybe even longer than that. Is that going to be a problem?

Mr. LUKKEN. A huge problem, sure. This is something that we've been straining under the pressure to oversee the markets, all the initiatives that we're going through, the Farm Bill with its authorities to go through, just the growth in the market itself requires us to get more staffing. So, yes, this is something I know we're not going to be able to bring up to speed with staffing immediately, but we have to be thinking, and as a steward of this agency, its long-term health to ensure that it has the proper staffing to do its job so that it can report to Congress with certainty that it's overseeing these markets.

Mr. BURGESS. I appreciate your attention to the long-term details.

Can you, and I don't have much time left or any time left, but can you in very simple terms, simple declaratory sentences, give us the difference between the Enron loophole, the London loophole, and the swaps dealers loophole?

Mr. LUKKEN. Well, the Enron loophole, as it's called, was meant to, over time, exempt commercial markets developed, which are ways of putting swap positions onto an electronic format. These positions became more and more price discovery vehicles, and we needed authorities to go along with that.

What's occurring in London and what we've announced with the FSA in London, these are fully regulated markets. And so we were trying to work with the British authorities to get the proper information from them and to harmonize the information and the position accountability and position limits on those markets. So that's what we've already taken steps to address, and I think those will be helpful in the future.

As far as the swap, the swaps exemption, that is something that's been in place, again, since 1991 as a policy. It's something, when the CFTC was reauthorized in 1986, the legislative history from Congress urged us strongly to consider exempting these types of transactions out of using hedge exemptions. So this is something, I wasn't around at the time, but I'm sure the commission took Congress's words to bear and decided to do this. So this is something we're readdressing. We're trying to get better information to understand whether this still makes sense, and if it doesn't, we'll make proper recommendations.

Mr. BURGESS. Let me ask you a question just on technical grounds as to what the language that's called the Enron loophole, that was actually passed in the Commodity Futures Modernization Act by the House of Representatives in October of 2002 and then picked up and put into a large appropriations bill. Did the language change between the time the House voted on its bill in October of 2002 and the time that the omnibus bill was passed later in December?

Mr. LUKKEN. Section 8 did not—or Section 2(h) did not change at all.

Mr. BURGESS. Did it change from May of 2002 when this committee marked up that legislation to the time it was voted on on the House Floor? Was the language the same from what this committee submitted for Mr. Ewing's bill to the House floor to be voted on in October?

Mr. LUKKEN. I believe it was the same.

Mr. BURGESS. So this was not language that was just thought up at the last moment?

Mr. LUKKEN. No. This was I believe put into the bill, and I think it went through both this committee, the Ag Committee and the Banking Committee at the time, and then came to the House floor with a statement of administrative policy in support of it.

Mr. BURGESS. So this would have been language that was voted on by Mr. Stupak and Mr. Dingell and Mr. Inslee, who all voted aye, but Mr. Green was not present at the time?

Mr. LUKKEN. In October of 2000.

Mr. BURGESS. Yes, in October of 2000.

I yield back my time, Mr. Chairman.

Mr. STUPAK. You don't have anything to yield. You're way over.

Mr. Inslee for questions.

Mr. INSLEE. Thank you.

There are five things that our previous witnesses have talked about: closing the three loopholes, the three Horsemen of the Apocalypse, I guess, the ICE, the swap, the Enron; measures to increase margin requirements is a fourth action; and a fifth, measures to restrict the positions that traders will have in a particular market. So there are five actions to be considered. I would like you to address each one of those actions. Tell me which ones would require some international action to have some significant effect, or which could be done just by the United States and still have at least considerable effect? And which ones would require congressional actions as opposed to you being able to take regulatory action with or without, forgetting that wisdom, but whether or not you have the authority to do it? Could you address each of those five?

Mr. LUKKEN. I think the first one, the exempt commercial market issue, was passed as part of the Farm Bill. And so we're addressing trying to within, I think we have 180 days to try to get out a rule on that and try to address the issue regarding what is called the Enron loophole.

The second issue dealing with foreign boards of trade, as stated, we are now getting the equivalent of large trader reports from the foreign board of trade that have links to the United States, both in London. So that will be helpful, as well as putting position limits on them, so we can do that administratively. But certainly I know that's been floating around; a codification of this would be helpful in my view.

Third, dealing with swaps, this is an issue that we've asked for additional information about a month ago to get better information from swaps to understand what type of transactions are coming onto our markets as a result of swap dealers. We hope to get that information. And by the way, that also includes sovereign wealth funds coming through swap dealers and to find out the type of information coming through those swap dealers. And hope to make recommendations to Congress by September 15th.

Margin, we do have authority, emergency authority to raise margins on exchanges. And I do believe we also have similar authority to raise or to implement position limits on exchanges as well.

Mr. INSLEE. So all five of those actions, it sounds like you could take, you mentioned one of them, that it would be helpful to have statutory authority in the ICE situation, but all five of them, you think you would have authority to take action now, then, even without specific statutory authority?

Mr. LUKKEN. And we have on the first three. We are taking administrative action on the first three.

Mr. INSLEE. And do you have intentions on margins or positions?

Mr. LUKKEN. Well, again, as far as the margin, in the futures market, it's meant to protect the clearinghouse to cover a 1-day price move in the futures markets. I think there are concerns that raising margins could drive this business elsewhere, and it would be difficult to get it back. There's no reason that the benchmark has to be in New York. It could be elsewhere in the world. And I think it would be terrible if we lost the oversight of those markets to other places.

Right now it's in New York, and we get all the information, and we get the information from London as well. So we're seeing the entirety of the crude oil regulated marketplace.

Mr. INSLEE. Isn't that, on margin, isn't that argument that it will drive people offshore really the same in equities and stocks? I mean, we have margin requirements here, and we have a pretty vibrant capital market here. Isn't it pretty much the same? We have attractions to be in this market for a variety of reasons, because of the stability of our economy, the relative stability of our political system. Margin requirements haven't destroyed our capital markets here, have they?

Mr. LUKKEN. No, but certainly regulation has been a concern in our capital markets, that excessive regulation is driving business elsewhere. And that's the Bloomberg-Schumer report that business was going to London and we need to reexamine our capital markets regulation——

Mr. INSLEE. Well, you're not suggesting reducing margin requirements in the equities markets because we're losing all this business?

Mr. LUKKEN. Absolutely not. I'm just saying that we have to be mindful that regulation does have an effect on the competitiveness.

Mr. INSLEE. Well, if we're mindful that we may be able to reduce oil prices by 30 to 50 percent just by increasing margin requirements, wouldn't that be a pretty good trade-off?

Mr. LUKKEN. Well, I'm not certain that that would be the effect of raising margins.

Mr. INSLEE. Well, even if it's half a percent it would probably outgun the loss of any potential loss of a capital market overseas; wouldn't it?

Mr. LUKKEN. Well, I think there are other measures, through transparency and other controls, that would be more effective than raising margin.

Mr. INSLEE. And what would those be?

Mr. LUKKEN. Well, certainly, trying to get better data to the public about what's happening overseas and what's happening in the swap markets, trying to bring greater transparency to those marketplaces, and ensuring that none of these markets people are evading position limits in order to speculate had they come directly to the marketplace.

Mr. INSLEE. Well, just as one Congressman, I hope you look at the Titanic effect of even small changes in the price of oil relative to the relative small effect on losing a trading position here or there to overseas swapping markets. The big savings is in oil prices.

Thank you.

Mr. STUPAK. Thank you, Mr. Inslee.

Mr. Dingell for questions please.

Mr. DINGELL. I am curious, what is a hedger?

Mr. LUKKEN. A hedger?

Mr. DINGELL. Yes.

Mr. LUKKEN. In our terms, it's somebody who has price risk to the underlying commodity.

Mr. DINGELL. OK. Now, what other categories or persons are there in the futures markets?

Mr. LUKKEN. What other categories do we break down?

Mr. DINGELL. Yes. You got hedgers are in there, and then you got other folks who are investors, or what are they, or are they speculators?

Mr. LUKKEN. Well, we currently break down in our commitment of trader reports commercials and noncommercials. So in the commercial category, we have both what you would say a physical hedger, somebody who is physically in the market, such as airline companies or refineries.

Mr. DINGELL. The airline company is a hedger; right?

Mr. LUKKEN. Pardon?

Mr. DINGELL. The airline company is a hedger; right?

Mr. LUKKEN. Yes.

Mr. DINGELL. And that's because they've got a legitimate interest in the commodity that they're interested in; right?

Mr. LUKKEN. Yes, sir.

Mr. DINGELL. Now, does a speculator have that?

Mr. LUKKEN. Speculators do not.

Mr. DINGELL. OK. Now, what is a commercial and what is a noncommercial. What are the differences between them?

Mr. LUKKEN. Well, commercials, typically people who have, again, an interest in the price, the underlying price risk.

Mr. DINGELL. An interest in the price, but do they ever receive the commodity?

Mr. LUKKEN. Well, certain commercials certainly do.

Mr. DINGELL. Some do and some don't?

Mr. LUKKEN. Yes.

Mr. DINGELL. Now, what is the guy who never receives the commodity? What is he? Is he a speculator?

Mr. LUKKEN. Typically speculators never receive the commodity. That's correct.

Mr. DINGELL. OK. Now, is there anybody else who doesn't receive the commodity?

Mr. LUKKEN. A lot of the swap dealers that we've been talking about also do not receive the commodity?

Mr. DINGELL. So a swap dealer doesn't receive. Now, what's the difference between a swap dealer and a speculator?

Mr. LUKKEN. Well——

Mr. DINGELL. Neither one of them receives a commodity, do they?

Mr. LUKKEN. No, but a swap dealer does bring a variety of different positions to the market.

Mr. DINGELL. He doesn't ever receive the commodity, does he?

Mr. LUKKEN. But many of his clients do.

Mr. DINGELL. Pardon?

Mr. LUKKEN. Many of his clients do.

Mr. DINGELL. His clients do?

Mr. LUKKEN. Correct.

Mr. DINGELL. What clients do?

Mr. LUKKEN. Well——

Mr. DINGELL. What is the swap dealer that you're talking about? Would it be Goldman Sachs?

Mr. LUKKEN. Goldman Sachs, Morgan Stanley, JP Morgan. But they represent clients; like United Airlines is a client of Morgan Stanley, and they manage all of their risk management for fuel oil delivery.

Mr. DINGELL. OK. Now, they represent also CalPERS?

Mr. LUKKEN. They certainly do.

Mr. DINGELL. And they represent the big asset funds?

Mr. LUKKEN. They do.

Mr. DINGELL. But they never receive any oil, do they, in these commodities exchange?

Mr. LUKKEN. Not the pension funds or endowments.

Mr. DINGELL. No. So what is the effect of all these folks being in there and not ever receiving oil? Are they raising costs or lowering costs or making the market liquid? What are they doing?

Mr. LUKKEN. Well, that's something that we're trying to find out with our special call that we——

Mr. DINGELL. Do you know, it used to be that you had a form that you circulated every month. It went to everybody in the futures business, right? Do you remember it?

Mr. LUKKEN. Commitment of Trader Report.

Mr. DINGELL. Yes. And as they received these forms, they wrote in the corner that they were a hedger or that they were a speculator, right? They checked a little box, right?

Mr. LUKKEN. Correct.

Mr. DINGELL. You don't have them check that anymore, do you?

Mr. LUKKEN. I think they still do, but we have classified swap dealers.

Mr. DINGELL. Can you tell me that they are and they do?

Mr. LUKKEN. They currently still check a box whether they're commercially hedging.

Mr. DINGELL. They do?

Mr. LUKKEN. Correct.

Mr. DINGELL. So does one of these commercial swaps guys, which box does he check, speculator or hedger?

Mr. LUKKEN. Well, our policy since 1991 has been that swap dealers are commercial businesses trying to hedge their underlying asset exposure that they're dealing with commercial business.

Mr. DINGELL. Now, how does CalPERS hedge their underlying exposure? They're a speculator aren't they?

Mr. LUKKEN. Well, they come to swap dealers and——

Mr. DINGELL. No, no, no. They're a speculator, aren't they? Isn't CalPERS a hedger?

Mr. LUKKEN. CalPERS?

Mr. DINGELL. They receive the oil. You told me that somebody who doesn't receive the oil is a hedger, right—or rather is a speculator?

Mr. LUKKEN. You could probably term them a speculator, sure.

Mr. DINGELL. So they're speculators. Now, it's interesting to note that Goldman Sachs doesn't receive a nickle's worth of oil, do they?

Mr. LUKKEN. No, they don't.

Mr. DINGELL. No, they don't. They just—so what I'm trying to understand is, how many speculators are in the market, and how many hedgers are in the market?

Mr. LUKKEN. Actually, to clarify, I understand that Goldman Sachs does have the ability to receive and make delivery on foreign oil.

Mr. DINGELL. We've gone beyond that. How many speculators are in the market, and how many hedgers are in the market, and how do you know the difference?

Mr. LUKKEN. I think, under current, about 36 percent of the oil market is traditional speculators. We have about 32 percent swap dealers in the market, and the rest is commercial participants.

Mr. DINGELL. Now, how much is this speculating affecting the market?

Mr. LUKKEN. Well, that's——

Mr. DINGELL. There are a lot of speculators in there. How much are the speculators affecting the market?

Mr. LUKKEN. Well, certainly we are looking at supply and demand, and there are strong fundamentals in place here.

Mr. DINGELL. I'm just a poor Polish lawyer up here, and I'm just sitting here asking a very smart fellow to tell me what's going on there. How do these speculators affect the market?

Mr. LUKKEN. Well, they bring information to the market and oftentimes very valuable information.

Mr. DINGELL. But are they raising the market price? Are they lowering the market price? What are they doing?

Mr. LUKKEN. Well, about half the time, they're on the short side of the market, benefitting when it goes down, and the other half are on the——

Mr. DINGELL. Are you telling me this is cancelling out?

Mr. LUKKEN. Well, a lot of their positions are.

Mr. DINGELL. Do you know that?

Mr. LUKKEN. Yes, we do.

Mr. DINGELL. Now, how much in the way of these futures contracts are there for oil, and how much oil is there moving through the market? Do they cancel each other out? In other words, do you have the same number of barrels of oil moving through the market that you have contracts for the movement of the oil?

Mr. LUKKEN. No, the futures markets are larger than the physical markets.

Mr. DINGELL. That's right. They're enormously larger. So are these enormously larger volumes of swaps and other things that you got going on there and speculations and so forth, are they affecting the market? Because here you've got, what is it, it's about 13 times as much as you've got in the way of oil, or rather in the way of contracts that you've got in the way of oil; is that right, 13 times? How many billion barrels is moving through the swap mechanism—or rather through the contracts mechanism, and how much is moving through the pipeline? What's the difference? It's about 13 times, isn't it?

Mr. LUKKEN. Well, these are risk management markets. A futures contract is not affecting the underlying supply.

Mr. DINGELL. We're not talking about risk management. I'll get to that when I'm ready. We're talking now about speculating. Speculation is not a risk management tool. It is a tool whereby you make money or lose your shirt, is that right?

Mr. LUKKEN. That's correct.

Mr. DINGELL. OK. So what is the relationship? You've got how many million barrels of oil are moving through the pipeline, and how many million barrels are moving through the contracts? Just tell me. You're in charge of this important agency that is here to tell us about these things. I'm waiting to hear the answer.

Mr. LUKKEN. I think it's about 13 times the physical.

Mr. DINGELL. Thirteen times. So we got here a situation where you got an elephant, which is the speculation, and you got the oil which is moving, which is a flea on the back of that elephant. The flea wants to go somewhere, but he can only go on the elephant. And the elephant can go anywhere he wants, but the flea has got to go along. Now, tell me how it is that this market situation works for the benefit of the consuming public, and how does it work for the benefit of those goodhearted folk up there in New York who are running this wonderful speculative enterprise? Who comes out ahead and who gets skinned? And how does the consumer come out of this when all these wonderful folks with billions of dollars in backing and exemption from you goodhearted folks at CFTC, how is the ordinary citizen, and how is oil price, and how is the well-being of this country going to prosper? If you look, when you gave that Goldman Sachs exemption, you had one number, a very small number, of contracts moving on the speculative part and you had a lot that were moving on the part of the market which related to the question of actually managing supply and managing price versus supply. How have those numbers changed?

Mr. LUKKEN. They've increased.

Mr. DINGELL. They've increased. How have they increased?

Mr. LUKKEN. Well, I think over the last 3 years, in particular, we've seen an increase in speculative trading from about 34 percent to 36 percent——

Mr. DINGELL. Well, the very——

Mr. LUKKEN [continuing]. On the swap dealer side.

Mr. DINGELL [continuing]. Capable staff has helped us both. Tell me if you agree. And I'll refer to Exhibit Number 2 that was prepared for us. In January of 2000, speculators, 37 percent; physical hedgers, 63 percent. Today, speculators, 71 percent; physical hedgers, 29 percent. That's 2008 versus January 2000. What can you tell me? How does this impact upon market prices? Do you have any idea? In 25 words or less, tell me what you know that this is doing to the marketplace?

Mr. LUKKEN. Well, the CFTC obviously——

Mr. DINGELL. Pardon?

Mr. LUKKEN [continuing]. Wants to keep in front of these trends, and we have asked for additional information from swap dealers.

Mr. DINGELL. Beloved friend, you are down there regulating a market. You are from the CFTC I am told. And the CFTC is supposed to regulate this market. By curious circumstance, I was in the House when a Member of Congress from Iowa forced through something it created, your entity. And he was going to see to it that the farmers, who then were the people who were being screwed, and the consumers, who were then the people being screwed, were going to be protected against these folks in the futures market. Now we find that these goodhearted folk in the futures market have figured out how not just to screw the farmers and the consumers in the city, but they figured out how to screw both the farmers and the consumers in the city on a whole new product, and that's oil. Now, what have you done to look at this to see what the cost is? Don't tell me you've got a study. These price increases have been going on. You've had better than a year in which you folks have been sitting idly by twiddling your thumbs watching to see what was going on, or at least you so tell me. But what have you found during that? What can you tell me about how these numbers that we are now discussing are affecting prices and why prices are moving? I'm listening.

Mr. BARTON. Mr. Chairman, I hate to interrupt, but our distinguished chairman has already doubled his time, and we have one more panel. I would hope this would be his last question.

Mr. DINGELL. I'm over my time, but it is a wonderful question.

Mr. BARTON. It is a wonderful question, but we have three more witnesses on a fourth panel.

Mr. DINGELL. I will write you a letter.

I ask you, Mr. Chairman, that I have permission to have that letter inserted in the record. I'm sure that the CFTC will be delighted to give us a response, perhaps even a factual one.

Mr. LUKKEN. I look forward to it.

Mr. STUPAK. Mr. Barton, did you want to go another round of questions?

Mr. BARTON. No, no. I appreciate the opportunity, but I would like to hear from the fourth panel.

Mr. STUPAK. All right.

Well, I have many more questions, but I guess we're going to have to go with the next panel.

Just one question if I may. We've had testimony that there's about 12.5 percent of the sovereign funds may hold as much as 12 percent. But yet, in talking with CFTC, it may be only, in your letter you sent to us, it was only one that you knew of. How can you get such a big discrepancy when there is as much as 12.5 percent of these sovereign wealth fund clients but you can only find one?

Mr. LUKKEN. What we reported was directly those sovereign wealth funds on our markets directly using the futures markets. I think what we will try to find out in getting more data from swap dealers is whether some of the sovereign wealth funds are coming through swap dealers indirectly out of the futures markets.

Mr. STUPAK. Very good, very good.

I said I would only take one more. I've got many more. We'll put them in writing, and we'll send it up to you.

I think we're going to move on to our next panel.

Thank you for your time here today, Mr. Lukken.

Let me call up our fourth and final panel to come forward today. We appreciate them being here and their patience today as we move forward on this very interesting issue.

The first is Mr. James Newsome, Ph.D., who is chief executive officer and president of the New York Mercantile Exchange; Mr. Robert Reid, who is chairman of the ICE Futures Europe for the International Exchange, Incorporated; and Mr. Michael Greenberger, J.D., who is professor of law and Director of the Center for Health and Homeland Security at the University of Maryland.

It's a policy of this subcommittee to take all testimony under oath. Please be advised that witnesses have the right under Rules of the House to be advised by counsel during their testimony.

Do any of you wish to be advised by counsel during your testimony?

Everyone is shaking their heads no. I take it as no then.

I'm going to ask you to please rise and raise your right hand to take the oath.

[Witnesses sworn.]

Mr. STUPAK. Let the record reflect the witnesses replied in the affirmative. They are now under oath. We will now begin with opening statements.

I'll start with you Dr. Newsome. If you would begin please, 5 minutes. If you have a longer statement, it will be included as part of the record.

You may begin, sir.

STATEMENT OF JAMES NEWSOME, PH.D., CHIEF EXECUTIVE OFFICER AND PRESIDENT, NEW YORK MERCANTILE EXCHANGE, NEW YORK, NEW YORK

Dr. NEWSOME. Thank you, Mr. Chairman.

NYMEX is fully regulated as a derivative clearing organization and as a designated contract market, which is the highest and most comprehensive level of regulatory oversight for a trading facility. I want to express our appreciation to you and the Committee for holding this hearing.

The ever-increasing cost of energy touches all aspects of our daily lives. Today it is quite possibly the most important issue facing global and domestic economies as well as U.S. consumers. The Commodity Futures Modernization Act of 2000 ushered in a period of phenomenal growth in derivatives markets. The CFMA has proven to be the gold standard of U.S. financial policy.

For the most part, the value and success of the CFMA holds true today. However, neither the Congress nor the CFTC had a crystal ball, and it was impossible to determine how some markets would develop. In at least two instances, markets have developed differently than anyone could have anticipated at the time.

First, that an OTC natural gas contract trading on an unregulated exempt commercial market could mirror an exchange regulated contract and that the two could become closely linked. Ultimately the OTC contract began to serve a price discovery function. Market participants could and did easily move positions from the regulated exchange to the ECM to avoid regulatory requirements, such as position limits.

This situation was investigated by the Senate Permanent Subcommittee on Investigations chaired by Senator Carl Levin with full cooperation from NYMEX and was addressed effectively in an amendment to the recently adopted Farm Bill.

Second, foreign boards of trade began offering futures contracts with U.S. delivery points to U.S. customers pursuant to CFTC no-actionletters. Historically, foreign exchanges were permitted to offer direct access to their markets to U.S. customers based upon a determination by CFTC staff that the foreign regulatory regime governing the foreign board of trade was deemed comparable to that of the CFTC.

This approach worked effectively until a foreign board of trade listed the look-alike of the NYMEX West Texas Intermediate Crude

Oil Futures contract without the level of transparency and market surveillance controls, such as position limits, that are required on U.S. markets. It was never anticipated that the no-action process would be utilized in this manner.

For 2 years now, NYMEX has argued that foreign board of trades offering linked products should be required by the CFTC to provide the same level and quality of data and at the same frequency that U.S. exchanges provide to the CFTC.

In addition, we believe that no-action letters for foreign boards of trade offering contracts with U.S. delivery points should be conditioned to impose position limits and/or accountability levels.

And we appreciate the announcement made last week by the CFTC to do just that.

Much has been said recently regarding the role of speculators and energy markets. Speculative activity on U.S. regulated futures exchanges is managed by position limits. For the NYMEX WTI Crude Oil Contract, the position limit during the last 2 days of the expiring delivery month is 3,000 contracts. Breaching that position can result in disciplinary action being taken by the exchange.

Many believe the speculators, particularly index funds and other large institutional investors in our markets, are responsible for the high price of crude oil. Data from NYMEX confirms that noncommercials are relatively balanced between long and short open positions for NYMEX crude oil futures. Thus, noncommercials are simply not and cannot be providing disproportionate pressure on the buy or long side of the crude oil market.

In fact, since October 2007, swaps dealers in our crude oil markets have been holding overall net short positions. Thus any price impact attributable to swaps dealers would be to lower prices, not to rise them.

Questions are being raised as to whether hedge exemptions for swaps dealers are being used by index funds and other institutional investors as a means of circumventing speculative position limits. The full extent of participation by swaps dealers, as well as what, if any, influence they are having on current market prices and volatility, cannot be determined without accurate data.

NYMEX believes that more precise data are needed to better assess the amount and impact of this type of trading. And NYMEX supports the further delineation of data in the CFTC large trader report.

In addition, we continue to believe that market fundamentals are the most important factor in the current market. Uncertainty in a jittery, very tight global crude market regarding geopolitical uncertainty, refinery sabotage, and shutdowns, decreasing production by non-OPEC producers and increasing global demand, as well as devaluation of the U.S. dollar, are clearly having an impact on the assessment of crude oil market fundamentals. One may view such factors as contributing to uncertainty or risk premium to the usual analysis or typical analysis of supply and demand data.

Mr. Chairman, while we may not be in total agreement on some of the issues discussed here today, we are in complete agreement that transparency is fundamental to a competitive marketplace. For 2 years, we have supported full transparency for U.S.-based energy contracts traded on foreign boards of trade and by controlling speculators by instituting speculative limits on those foreign boards of trade. And finally, we remain fully supportive of further delineation of information from swaps dealers and funds in the CFTC large trader reports.

Thank you, sir.

[The prepared statement of Dr. Newsome follows:]

STATEMENT OF JAMES NEWSOME, PH.D.

- The Commodity Futures Modernization Act of 2000 significantly enhanced the competitiveness of U.S. markets by allowing them to adapt readily to changing market demand, and, for the most part, the value and success of the CFMA holds true today.
- However, it was impossible to know then what we know now about how some markets would develop.
- Complete transparency is fundamental for competitive markets.
- The same level of transparency and position size controls present on regulated U.S. futures markets should be the standard for foreign markets offering products with U.S. delivery points and for OTC contracts that serve a price discovery function.
- Additionally, a case has been made for disaggregation and delineation of positions held by swap dealers. This will provide important information to determine whether speculative position limits are being avoided by index funds and other institution investors and whether their activity is influencing market prices.
- Many factors are contributing to high energy prices. NYMEX continues to believe that market fundamentals are a significant factor that must not be discounted in this debate.
- Increasing margins to dampen speculative activity will not change the fundamentals and will inevitably drive business away from the highly regulated, transparent market. This will do more harm than good.

TESTIMONY

Mr. Chairman and Members of the Committee, my name is Jim Newsome and I am the President and Chief Executive Officer of the New York Mercantile Exchange, Inc. (NYMEX or Exchange). NYMEX is the world's largest forum for trading and clearing physical-commodity based futures contracts, including energy and metals products, and has been in the business for more than 135 years. NYMEX is a federally chartered marketplace, fully regulated by the Commodity Futures Trading Commission (CFTC or Commission) both as a "derivatives clearing organization" (DCO) and as a "designated contract market" (DCM), which is the highest and most comprehensive level of regulatory oversight to which a derivatives trading facility may be subject under current law and regulation.

On behalf of the Exchange, its Board of Directors and shareholders, I want to express our appreciation to the Committee for holding this hearing and addressing the issue of "Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?" The ever increasing cost of energy touches all aspects of our daily lives and today is quite possibly the most important issue facing global and domestic economies as well as U.S. consumers. Highlighting the urgency of the matter, no fewer than seven bills have been introduced in the House and Senate over the last few weeks on this very topic. We applaud the Committee's decision to thoroughly evaluate the many facets of this topic by inviting a diverse group of panelists who can provide a broad array of opinions to the discussion.

BACKGROUND

The Commodity Futures Modernization Act of 2000 (CFMA) was the premier legislative vehicle that transformed the regulation of derivatives markets in two important ways. The CFMA: 1) established flexible core principles to allow regulated exchanges to compete effectively with the growing over-the-counter (OTC) markets and foreign markets and; 2) provided legal certainty to financial and energy swaps. The CFMA, as anticipated, ushered in a period of phenomenal growth in the derivatives markets and has proven to be the gold standard of U.S. financial policy. As Acting Chairman and then Chairman of the CFTC from 2001–2004, I was involved in the implementation phase of this landmark piece of legislation.

The CFMA significantly enhanced the competitiveness of U.S. markets by allowing them to adapt readily to changing market demand, and, for the most part, the value and success of the CFMA holds true today. However, no one had a crystal ball back then and it was impossible to know then what we know now about how some markets would develop. In at least two instances, markets have developed differently than anyone could have anticipated at the time.

First, an OTC natural gas contract began trading on an unregulated exempt commercial market (ECM) that mirrored the regulated exchange-traded natural gas futures contract and the two contracts became intricately linked. Over time, the volume on the ECM contract grew substantially, and an arbitrage market developed between the two markets. Ultimately, the OTC contract began to serve a price discovery function. Thus, ECMs began to function more like a traditional exchange and market participants easily moved positions from the regulated exchange to the ECM to avoid regulatory requirements such as position limits, a strategy that contributed to the collapse of Amaranth. This scenario was investigated by the Senate Permanent Committee on Investigations chaired by Senator Carl Levin. (NYMEX cooperated in this investigation.) Ultimately, this situation was addressed effectively in an amendment to the recently adopted Farm Bill.

Second, non-U.S. exchanges (also referred to as foreign boards of trade (FBOT)), which were permitted by CFTC staff to offer their products to U.S. customers pursuant to CFTC no-action letters, began listing futures contracts with U.S. delivery points among their product slates. Historically, under the FBOT CFTC staff no-action process, such exchanges were permitted to offer direct electronic access to their markets to U.S. customers based on a determination by CFTC staff that the foreign regulatory regime governing the the FBOT was “comparable” to that of the CFTC.

Essentially, there is a system of mutual recognition among regulators around the world as a means to facilitate access to global markets. This approach worked effectively up until a FBOT listed the look-alike of the NYMEX West Texas Intermediate (WTI) Crude Oil Futures contract without the level of transparency and market surveillance controls such as positions limits that are provided by U.S. markets under direct CFTC regulation. It was not anticipated that the no-action process would be used in this manner, which has effectively diminished the transparency to the CFTC of approximately one-third of the WTI crude oil market, and permitted an easy avenue to circumvent position limits designed to prevent excessive speculation.

FOREIGN BOARDS OF TRADE AND TRANSPARENCY

NYMEX has advocated for greater transparency of futures activity linked to U.S. exchanges occurring on markets regulated by foreign regulators for two years. Complete transparency to the CFTC should be a fundamental requirement for markets that are linked. In this connection, we have argued that FBOTs offering these linked products should be required by the CFTC to provide the same level and quality of data and at the same frequency that U.S. exchanges provide to the CFTC on a daily basis.

In addition, we believe that no action letters for FBOTs offering contracts with U.S. delivery points should be conditioned to impose position limits and/or accountability levels. This would be a positive step and would provide an effective mechanism to restrict speculative activity in those markets. This is particularly important when the contract trading on the FBOT is the WTI crude oil contract, which is a benchmark for crude oil pricing, and which can have a substantial impact on U.S. consumers and the U.S, economy. Indeed, we would support the imposition of position limits even for listed contracts that are financially settled. We applaud the CFTC’s recently issued press release that advised that the CFTC is now imposing position limits on ICE Futures Europe as a condition of the no-action relief.

In this regard, approximately one year ago, a new futures exchange, the Dubai Mercantile Exchange (DME), commenced operations in Dubai. NYMEX is a founder and has an ownership share in this venture and provides clearing services for the new exchange. The core or flagship crude oil futures contract is an Oman Sour Crude Oil futures contract. The DME initiative provides competition and greater transparency to crude oil trading in a critically important energy region. Although the DME does not yet list a WTI financial futures contract, the DME has received a no action letter from the CFTC staff for this contract and NYMEX received an amendment to its Clearing Order allowing our exchange to clear positions. The DME is currently finalizing a launch date for that contract. It is our understanding that, when a launch date is finalized on the DME WTI contract, DME will implement hard position limits that are comparable to NYMEX’s own limits on our WTI crude oil futures contract. Also, as part of the NYMEX Clearing Order, large trader reporting to both the CFTC and NYMEX is required.

In a more recent initiative, NYMEX has entered into an alliance with a London-based clearinghouse, LCH.Clearnet Limited (LCH), under which LCH will provide clearing services for two new product slates to be launched later this summer either by NYMEX or by a NYMEX affiliate. These new product slates are intended to provide greater competition to other energy trading facilities that are active in this energy space. One product slate, focusing upon natural gas and electricity contracts, will be listed by a division of NYMEX in the exempt commercial market tier. Applicable products in this category will comply fully with the requirements for significant price discovery contracts contained in the recently implemented CEA Reauthorization Farm Bill. The other product slate, focusing upon crude and crude products, will be listed for trading by a NYMEX affiliate based in London that will be regulated by the U.K. Financial Services Authority. While that affiliate will follow the path of other exchanges regulated by other regulators and will be applying for CFTC no-action relief, this affiliate will provide large trader reporting to the CFTC and also will impose hard position limits on any listed contracts with U.S. delivery points.

SPECULATION

Speculative activity on futures exchanges is managed by position limits. As stated in the CFTC's rules, position limits and accountability levels are required "to diminish potential problems arising from excessively large speculative positions." These limits effectively restrict the size of a position that market participants can carry at one time and are set at a level that greatly restricts the opportunity to engage in possible manipulative activity on NYMEX. For the NYMEX WTI crude oil contract, the position limit during the last three days of the expiring delivery month is 3000 contracts. Breaching the position limit can result in disciplinary action being taken by the Exchange.

Many believe that speculators, particularly index funds and other large institutional investors in our markets are responsible for the high price of crude oil. However, data analysis conducted by our Research Department confirms that the percentage of open interest in NYMEX Crude Oil futures held by non-commercial participants relative to commercial participants actually decreased over the last year even at the same time that prices were increasing. In addition, non-commercials are relatively balanced between long (buy) and short (sell) open positions for NYMEX crude oil futures. Thus, non-commercial participants are not providing disproportionate pressure on the long (buy) side of the crude oil futures market. We also reviewed the percentage of open interest in the NYMEX Crude Oil futures contract held by non-commercial longs and shorts relative to that held by commercial longs and shorts from 2006 to the present. Commercial longs and shorts consistently have comprised between 60 and 70% of all open interest.

We have seen various representations made relative to participation by speculators in our markets that directly contradict our data. One such representation claims that 70% of our crude oil market is made up of speculators. That analysis incorrectly assumes that all swap dealers are non-commercials and that all of their customers who would be on the opposite side of any energy swaps that they might execute would also all be non-commercials. We know that this is simply not the case. However, this confusion clearly highlights the need for the CFTC large trader data to delineate for energy futures the degree of participation by non-commercials in the same manner that such data are now being delineated for agricultural contracts.

NYMEX also maintains a program that allows for certain market participants to apply for targeted exemptions from the position limits in place on expiring contracts. However, such hedge exemptions are granted on a case-by-case basis following adequate demonstration of bona fide hedging activity involving the underlying physical cash commodity or involving related swap agreements. A company is not given an open-ended exemption, and the exemption does not allow unlimited positions. Instead, the extent of the hedge exemption is no more than what can be clearly documented in the company's active exposure (as defined by the CFTC) to the risk of price changes in the applicable product. In a number of instances, hedge applications are either reduced in number or are denied because of staff's overriding focus on maintaining the overall integrity of our markets.

A vast amount of attention is focused on speculative activity and what, if any, influence speculators are having on current market prices and volatility. In order to determine accurately whether speculative activity is influencing the market, the data must be complete and accurate. Recently, a potential gap was identified in the large trader data compiled by the CFTC in its Commitment of Trader's Report. Specifically, questions are being raised as to whether hedge exemptions for swap dealers are being used as a means of circumventing speculative position limits.

At this time, due to the manner in which the data are reported, it is not clear whether this is true or not. In response to these queries, the CFTC announced its intent to develop a proposal that would routinely require more detailed information from index traders and swaps dealers in the futures markets, and to review whether classification of these types of traders can be improved for regulatory and reporting purposes. NYMEX believes that it will be useful to the development of thoughtful public policy for the CFTC to obtain more precise data so as to better assess the amount and impact of this type of trading in the markets.

MARKET FUNDAMENTALS

NYMEX strongly believes that greater transparency is needed and that data on participation of swap dealers and index funds must be improved in order to effectively monitor these markets and accurately assess what is or is not influencing the price. In addition, we continue to believe that market fundamentals are the most important factor in the current market. Currently, uncertainty in the global crude market regarding geopolitical issues, refinery shutdowns and increasing global demand, as well as devaluation of the U.S. dollar, are clearly having an impact on the assessment of market fundamentals. One may view such factors as contributing an uncertainty or risk premium to the usual analysis of supply and demand data. Indeed, such factors now may fairly be viewed as part of the new fundamentals of these commodities.

Other demand and supply fundamentals in the oil markets are factors in high oil prices. For example, global demand is exceeding supply by one million barrels per day. As a result, a market with highly inelastic demand will need to equilibrate through a substantive rise in price. The upward pressure has been there and, according to these projections, will continue to be there. If the major oil companies truly believed that current levels are artificially high and do not properly reflect market fundamentals, one would expect them to sell in order to lock in the current high prices. Such selling of course then would have the effect of providing downward pressure on prices. However, such a response by the big oil companies has not been observed to date.

MARGINS

In futures markets, margins function as financial performance bonds and are employed to manage financial risk and to ensure financial integrity. A futures margin deposit has the economic function of ensuring the smooth and efficient functioning of futures markets and the financial integrity of transactions cleared by a futures clearinghouse. Margin levels are routinely adjusted in response to market volatility. Some have suggested that the answer to higher crude oil prices is to impose substantially greater margins on energy futures markets regulated by the CFTC. The theory is that higher margin levels will dampen speculative activity, and that less speculative liquidity will lower prices.

We believe that this approach is misguided. As noted above, the appropriate tool for controlling speculation is position limits. In addition, adjusting margin levels significantly upward will not change the underlying market fundamentals. Furthermore, given the reality of global competition in energy derivatives, increasing crude oil margins on futures markets regulated by the CFTC inevitably will force trading volume away from regulated and transparent U.S. exchanges into the unlit corners of unregulated OTC venues and also onto less regulated and more opaque overseas markets.

CONCLUSION

Complete transparency is fundamental for competitive markets. The same level of transparency and position size controls present on regulated U.S. futures markets should be the standard for foreign markets offering products with U.S. delivery points and for OTC contracts that serve a price discovery function. Additionally, a case has been made for disaggregation and delineation of positions held by swap dealers. This will provide important information to determine whether speculative position limits are being avoided by index funds and other institution investors and whether their activity is influencing market prices.

Many factors are contributing to high energy prices. NYMEX continues to believe that market fundamentals are a significant factor that must not be discounted in this debate. Increasing margins to dampen speculative activity will not change the fundamentals and will inevitably drive business away from the highly regulated, transparent market. This will do more harm than good.

I thank you for the opportunity to share the viewpoint of the New York Mercantile Exchange with you today. I will be happy to answer any questions that any Members of the Committee may have.

Mr. STUPAK. Thank you, Dr. Newsome.

Mr. Reid, would you care to make an opening statement please?

STATEMENT OF SIR ROBERT REID, CHAIRMAN, ICE FUTURES EUROPE, INTERCONTINENTAL EXCHANGE, INC., ATLANTA, GEORGIA

Mr. REID. Chairman, I am Sir Bob Reid, Chairman of ICE Futures Europe and the Intercontinental Exchange. I very much appreciate the opportunity to appear before your hearing today to provide our views on the issue of whether greater regulation is necessary to stop price manipulation.

Our primary objective in ICE Futures Europe is to conduct an orderly market, which is clear rules and procedures, which is financially secure, which is transparent, presenting prices and transactions in a comprehensible way, and which is free from abuse. The achievement of this objective is by effective and intelligent supervision. Intimate knowledge of the participants and the business they are transacting is key. This positive approach that supervision has built the reputation of the Exchange and is an attraction for its participants.

Let me stress there can be no substitute for active management. While we respect the limits set by the regulators, we do not see their observance as a substitute for continuous surveillance. There have been allegations recently that the regulatory system in London is lax. There has been a massive flow of market data from the Exchange to regulators in London and Washington since the launch of our WTI contract in early 2006. And the continuous interaction between our Exchange and regulators on both sides of the Atlantic reflect regulatory regimes which are active and alert and have a detailed conversance with our business.

It's important to note that as recently as last week the Director of Enforcement of the CFTC publicly stated that the commissioners see no evidence of manipulation in our markets. With that said, let me make it quite clear that we have and always will be receptive to the concerns of the regulators. This sets the background against which I shall address your question whether greater regulation is necessary to stop price manipulation.

Let me first of all describe the participants in our market. The participants are similar to those in the United States market. Membership in the London Exchange involves full diligence, appropriate money laundering checks, and possession of all the necessary licenses. The commercial participants in our markets seek risk management and stabilizing of their future costs. The financial participants provide the liquidity necessary to make the market efficient. Together, these two sets of market participants bring their views about what the present and future, and let me stress the word "future," what the future price of a commodity might be.

There has been much negative comment about the role of the financial participants, characterizing them as speculators. This negative comment is misplaced. Financial participants are a valuable source of liquidity to the market. This liquidity allows the commercial participants to hedge their energy costs more efficiently and stabilize their prices to the end consumer. Furthermore, studies have shown that financial participants are on both sides of the market and in many instances dampen price volatility, which can be helpful in times of rising prices. Without the ability to hedge, the commercial participants would have to factor the risk into their pricing to the end consumer, to the end consumer's financial disadvantage.

Returning to the question, the account information flows between regulators are robust, and we've agreed to improve them as market dynamics have changed and the domestic regulator has requested additional information on the imposition of a position accountability regime. However, it's important to note that the outcome of these steps and many of the other suggested legislative steps under consideration are unlikely to change the market dynamics that are driving the price of oil.

As the Chairman of the Exchange, my role is, however, confined to the operation of the mechanism which provides price discovery. Our discharging of this duty is as important to the consumer as it is to the oil producer.

I thank you.

[The prepared statement of Mr. Reid follows:]

ice

Atlanta Calgary Chicago Houston London New York Singapore

WRITTEN TESTIMONY OF SIR BOB REID
CHAIRMAN, ICE FUTURES EUROPE
BEFORE A HEARING OF THE COMMITTEE ON ENERGY AND COMMERCE FOR THE 110TH CONGRESS

June 23, 2008

Chairmen Dingell and Stupak, Ranking Members Barton and Shimkus. I am Sir Bob Reid, Chairman of ICE Futures Europe and a Director of IntercontinentalExchange Inc.

I very much appreciate the opportunity to appear before your hearing today to share ICE Futures Europe's views on the proper amount of regulation is necessary to prevent price manipulation.

Background

ICE Futures Europe, formerly the International Petroleum Exchange of London Ltd, is the leading energy futures exchange outside the United States of America. The Exchange was formed in 1980 and operated as a mutual exchange until 2001 when it was acquired by IntercontinentalExchange Inc. Its primary mode of operation was open outcry trading until 2005 when all trading was switched to the ICE electronic platform. ICE Futures Europe is the home of the Brent Crude Futures contract, a North Sea blend of crude oil. The Brent complex, of which our futures contract is a part, forms the basis for pricing – directly or indirectly – for two thirds of world traded crude oil[1]. We also operate a Gas Oil futures contract – a European heating oil – the primary pricing benchmark for European middle distillate products as well as UK natural gas and electricity contracts. In conjunction with our partners at the Chicago Climate Exchange we operate the market for the European Climate Exchange, which is now the largest carbon market in the world.

The customers of ICE Futures' market are based all over the world. Even when ICE Futures was an open outcry exchange, customers from all over the world used its markets by phoning their orders in to the trading floor in London. Today the trading floor is a virtual one, with orders being sent to the market through computer terminals – but the global nature of our markets has not changed. We have regulatory clearance for our screens to operate in over fifty jurisdictions around the world.

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[1] Source: Brent: A User's guide to the Future of the World Price Marker (Liz Bossley, CEAG, 2007)

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In February 2006 we launched a financially settled futures contract for West Texas Intermediate (WTI) crude oil, oil to complement our Brent crude oil contract since both are similar light sweet grades of crude oil. . We chose to offer a financially settled WTI contract at a time when NYMEX was committed to retaining and promoting open outcry trading rather than pursuing electronic trading. As the first to launch an electronically traded WTI contract on a robust electronic trading platform, our contract was successful taking market share from NYMEX. Since the launch of electronic trading by NYMEX, most of the growth in trading of WTI crude oil has been on the NYMEX rather than the ICE market. Nevertheless, the ICE WTI contract is an important contract for ICE Futures Europe, as it is used by commercial participants to hedge exposure to small differences in WTI and Brent prices. Notably, NYMEX similarly offers a cash settled Brent crude oil future settling on ICE Futures Europe's final settlement price for precisely the same reason. Today, ICE has a relatively small 15% share of total WTI futures and options open interest, while NYMEX retains the remaining 85%.

Regulatory framework: ICE Futures Europe's Operations

ICE Futures Europe is a Recognized Investment Exchange which operates under a legislative framework set out in the Financial Services and Markets Act 2000. This framework gives the exchange an equivalent regulatory status under UK law to the status that U.S. Exchanges have under US law. The Exchange is subject to supervision by the Financial Services Authority, which has a designated team whose responsibility is to oversee the work of UK exchanges and other recognized bodies. The financial services regulatory regime in the United Kingdom is well-established and has been used as a model in the design of other regulatory systems around the world.

All contracts traded on ICE Futures Europe are subject to UK law and regulation. For European market participants, this is important for a variety of reasons, including the applicability of UK bankruptcy and insolvency laws in the event of a contract default. All of ICE Futures Europe's contracts are cleared in London by LCH.Clearnet Limited, which acts as central counterparty to all trades on the Exchange. Clearing of such contracts is shortly to be transferred to our own new London-based clearing house, ICE Clear Europe.

At all times since it became a subsidiary of ICE, Inc., ICE Futures Europe has been headquartered in London and has operated as a Recognised Investment Exchange. At all times during this period, ICE Futures Europe has been governed by a separate board of directors, which I chair, and which is accountable to the Financial Services Authority for the operation of ICE Futures Europe's markets. The board's members include myself, the President of ICE Futures Europe, the Chairman and CFO of ICE Inc. and three independent members. This separate governance structure and degree of independence within the ICE, Inc. group is mandated by the Financial Services Authority in order for

ICE Futures Europe to maintain its status as a Recognised Investment Exchange and a self regulatory organization. ICE Futures Europe has approximately seventy employees, all of whom are based in the United Kingdom.

It is important to address one issue head-on, and this is the prior statements and suggestions of certain third parties that ICE Futures Europe is "operated to take advantage of a regulatory loophole", that it is "operated out of Atlanta, Georgia," or that somehow its operations lack regulatory substance and legitimacy. These statements are false.

Our role

Our role as a Recognised Investment Exchange is to provide a fair and orderly market in which the interaction of market participants is allowed to determine prices. We strive to be strictly neutral and independent. Our role is neither to be on the side of the producer nor the consumer; we are dedicated to ensuring that price formation is fair.

A fair and orderly market

Being a fair and orderly market means operating within a framework laid down by law and regulation. The ultimate decision-taking body of the Exchange is its board of directors. The rule-making functions are fulfilled by the Authorization, Rules and Conduct Committee under delegation from the board. Changes of significance are brought back to the board for approval. There is an independent disciplinary framework which is followed in circumstances where the Exchange pursues disciplinary action against members.

The ICE Platform has sophisticated audit facilities which allow it to record extensive information about every trade on the platform. Compliance staff monitor trading patterns and price movements to identify circumstances which warrant further investigation. They seek to identify improper conduct, and in particular, any attempt to manipulate the market.

As well as receiving information about transactions, the Exchange also receives information about any large positions held by members, including details of the customer(s) responsible for such positions. While ICE Futures does not presently impose formal position limits or position accountability rules (but recently has agreed to do so with respect to its WTI contract at the request of the CFTC), the Exchange receives daily reports from all members who hold large positions in the front two months of any contract detailing who is responsible for holding such positions. The Exchange can ask members to reduce positions in any contract if they judge them to be unduly large and has the power to compulsorily close out positions.

There is a particular focus on physically-delivered contracts – in particular Gas Oil – where it is possible for delivery squeezes to occur, for example by a single participant obtaining control of most of the oil due for delivery in a particular month. In financially-settled contracts such as WTI this risk does not exist in the same way because physical delivery does not occur.

The Exchange has the power to bring disciplinary proceedings against its members. Where an investigation identifies issues beyond its direct control the Exchange will notify the Financial Services Authority and, if appropriate, relevant overseas regulators such as the CFTC.

Cooperation with the CFTC

As noted above, the ICE WTI contract is financially-settled, which narrows the area of risk in comparison with a physically-delivered contract. Nonetheless it is clearly important that the CFTC has the opportunity to have an overview of the market to ensure that there is no activity across Nymex and ICE that might be construed as price manipulation or market abuse. In November 2006, ICE Futures Europe, through the memorandum of understanding between the FSA and the CFTC, began providing trader position data on WTI for the prompt two months. On 29 May 2008, we agreed with the CFTC and FSA an extension of this information sharing to encompass position information across the entire expiry horizon, on a daily basis. Some of this has already been instituted – the CFTC already receives an analysis of positions in the WTI contract on a member by member basis for every contract month. Full implementation is due in the near term.

On 17 June 2008 the CFTC announced an amendment of the conditions under which we are permitted to operate in the United States. They amended the "no-action relief letter" under which ICE Futures Europe is permitted direct access to US customers. The amended letter conditioned our direct access on ICE Futures Europe's adoption of equivalent U.S. position limits and accountability levels on the ICE WTI Crude Oil Futures Contract. In addition, ICE Futures Europe will provide data identifying commercial and noncommercial participants that will allow the CFTC to incorporate the ICE Futures WTI contract into the Commitment of Traders Report. The agreement will be enforceable through the CFTC's broad authority over U.S. traders; the exchange's robust rule enforcement, and the oversight of the FSA.

In addition, pursuant to the amended letter, we will follow similar US hedge exemption requirements and will report violations of any such provisions to the CFTC. This action also formalizes the information sharing announced in May. The CFTC will incorporate data directly into the CFTC's Commitments of Traders report, their weekly report categorizing traders and positions. The revised Commission staff foreign access conditions must be satisfied by ICE Futures Europe within 120 days. The changes are subject to the approval of the UK Financial Services Authority.

Rising oil prices

Oil prices are at historically high levels. US oil prices so far in 2008 have averaged $109, around one third higher than the 2007 average of $72. The causes of these oil price rises are complex and much has been written about them, particularly in recent weeks. Some commentators have asserted that the bulk of the recent increase in oil prices is related to the 'fundamentals'.

In a report published earlier this month the International Energy Agency said "supply growth so far this year has been poor and higher prices are needed to choke off demand to balance the market." It went on to say that abnormally high prices are largely explained by the fundamentals.

Jeffrey Harris, the chief economist of the Commodity Futures Trading Commission (CFTC) said in a recent Senate testimony that he did not see any evidence that the growth of speculation in oil has caused the price to rise. Rising prices might have stimulated the growing investment rather than the other way round, Harris noted. In the oil futures market, investment can flow in without driving up the price because the speculators are not buying actual crude to be able to hold onto it or keep it off the market. Instead, contracts are bought for future delivery. When the contracts mature, they either cash settle them or sell them to genuine consumers of oil. The contracts allow traders to take a view on price direction with the number of views not affecting the amount of oil available.

Some have asserted that the primary cause of recent oil price rises is speculation. "Speculation", however, needs to be distinguished from manipulation, which is to deceive investors by controlling or artificially affecting a market. A central role of a regulated marketplace such as ours is to take steps to prevent and detect such manipulation.

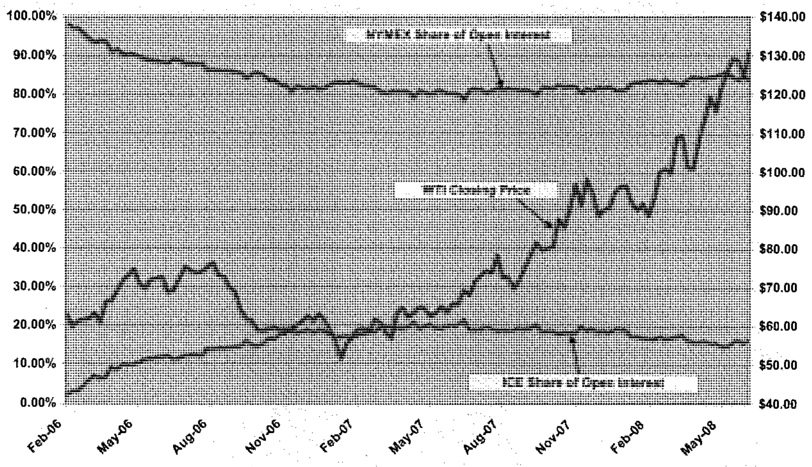
Rather than "speculation" I prefer the term "financial participation". There is nothing wrong with financial participation in oil markets per se. Such participation helps to increase liquidity, which makes it easer for market participants to get in and out of positions at a given price, and make it more difficult for any individual participant to manipulate the market. Financial participants are the counterparties to the commercial entities who hedge their production or consumption. Such participants can take either 'long' or 'short' positions depending on their expectations of the way in which prices will change.

Recent price moves

The increase in oil prices has been particularly marked since January 2007, when oil prices stood at $58 per barrel. During the period from 2000 to 2007 we had seen a steady upward movement in the oil price, but over the past six months in particular we have seen a breakout from those price levels. During this time, the dollar has been devalued; supply has decreased, while demand has remained constant. We have also seen particularly high volatility prices with a move in the WTI price of over $10 on 6th June2008.

Some have asserted that the change in WTI prices since the beginning of 2007 has been driven by speculative traders building large positions in the ICE WTI contract. The facts, however, indicate otherwise as ICE Futures Europe's share of global WTI open interest has declined from about 20% to 15% over that same period. Furthermore, the total WTI open interest, on both the Nymex and ICE contracts has not increased materially over the past year, and indeed is significantly lower than its peak levels.

WTI Crude Oil - Open Interest*
NYMEX and ICE



** Includes all futures and option future equivalents*

Margin levels

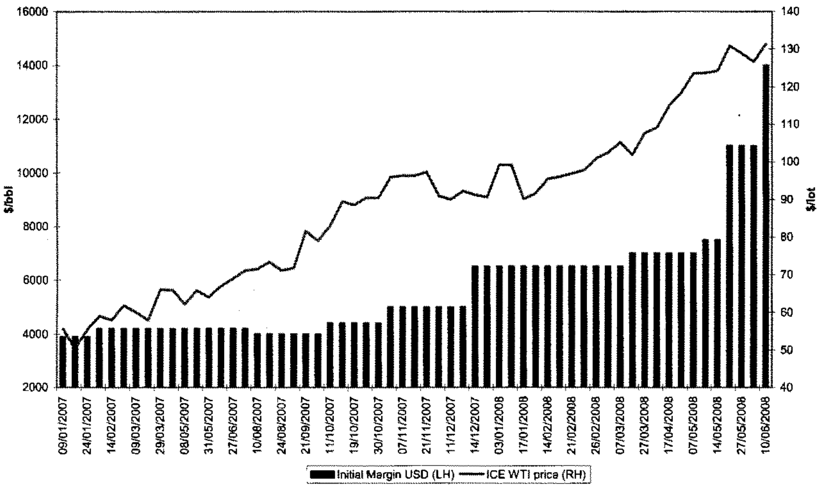
One proposal under the Consumer First Energy Act of 2008 is to require the CFTC to substantially increase the margin requirement on crude oil futures trades.

It is the responsibility of a Futures Market to be a neutral venue for the setting of prices. Margins are required by clearing houses for the purpose of ensuring that they have adequate security in the event of the default of a market member. Margins are used by a clearing house to manage risk and should be set on the basis of the needs of risk management and of risk management alone. The level of margins is calculated by clearing houses on the basis of calculations carried out in accordance with a proven margining methodology such as SPAN – an approach which was developed by the Chicago Mercantile Exchange and is also used by Nymex and LCH.Clearnet and will be used by ICE Clear. Changes in margin levels tend to be driven by changes in price levels and levels of volatility.

Artificially increasing margin levels on regulated futures markets would drive business either to futures markets in other jurisdictions where there are no such constraints, or to off-exchange OTC marketplaces where clearing is not available. Moving business away from cleared markets is precisely the opposite of what should be done at a time of highly volatile prices and systemic financial risk. Clearing provides a valuable function in the mitigation of financial risk and has been a tried and tested source of risk mitigation at a difficult time for financial markets.

Even if margins were to be increased it is not clear that such increases would reduce price levels. They could well introduce market distortions that could drive up prices, particularly in circumstances where commercial participants found it more difficult to meet higher margins than financial participants, or where financial participants with short positions were forced to buy them back.

Margin levels have in fact been increasing over recent months. Margin levels today are over 3.5 times margin levels at the start of 2007. They have been set at those levels because of the higher volatility that we have seen in oil markets. We have not seen evidence that this increase in margins has reduced prices.



Initial margin rates shown again price movements in ICE WTI Crude Futures

Foreign Boards of Trade

The last time I took part in a public hearing in Washington was during 2006, when the then Chairman of the CFTC, Reuben Jeffrey, convened public hearings to consider the issue of the regulation of Foreign Boards of Trade in the US. Consideration of the issue at that time was largely triggered by the launch of the ICE WTI Crude Futures Contract. An overwhelming majority of participants in those hearings thought that the CFTC 'no action' regime had been very successful. The CFTC reaffirmed its no action regime thereafter[2], recognizing the benefits of regulatory cooperation and mutual recognition. The basis of this approach is that markets, particularly oil markets, are global. Participants are based all over the world and cooperation between regulators is crucial in this context. ICE Futures has cooperated fully with the CFTC and will continue to do so. As well as supplying position information on a regular basis ICE has provided extensive transaction information to CFTC to assist in investigations.

Conclusion

We recognize the severe impact of high crude oil prices on the U.S. economy and understand the Congressional desire to "leave no stone unturned." However, with a 15%

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[2] CFTC Release: 5252-06 issued October 31 2006

share of global WTI futures and options open interest; we feel it is highly unlikely that our WTI contract is the primary driver of WTI prices. This “inconvenient truth” clearly contradicts any notion of a London loophole.

Our view, Mr Chairman, is therefore that the current regulatory regime works well, and that greater regulation is not the answer. The priority for regulators in our increasingly interconnected world should be increasing cooperation with their counterparts in other countries. This is best promoted and developed by the international sharing of best practice in the context of an environment where comparable regulators operate within a framework of mutual recognition. This is a framework in which the CFTC and the FSA take a leading role, and one which they should seek further to build on in the future.

Mr. STUPAK. Thank you, Mr. Reid.

Professor Greenberger, your opening statement, please, sir.

STATEMENT OF MICHAEL GREENBERGER, J.D., PROFESSOR OF LAW, DIRECTOR, CENTER FOR HEALTH AND HOMELAND SECURITY, UNIVERSITY OF MARYLAND, BALTIMORE, MARYLAND

Mr. GREENBERGER. Good afternoon. I want to start by saying that section 8(a)(9) of the Commodity Exchange Act gives the Commission what has been called its most potent tool. It provides that whenever the Commission has reason to believe that an emergency exists, it may take such actions, including but not limited to, the setting of temporary emergency margin levels on any futures contract and the fixing of limits, speculation limits, that may apply to a market position.

What is an emergency under the Commodity Exchange Act? It means in addition to threatened or actual market manipulations or corners, any act the United States or a foreign government takes affecting a commodity or any other major market disturbance which prevents the market, which prevents the market from accurately reflecting the forces of supply-demand. I think everything you heard this morning talks about a situation that is an emergency that the market does not accurately reflect the forces of supply-demand.

Now you might well ask yourselves why, after a day like June 6th, when oil skyrocketed $11 in one day, there wasn't an emergency with temporary margins and position limits set by the Commission. And the answer to that I think is quite simple. They have the information from Mr. Newsome. They don't have the information from ICE, so they don't know what is happening on ICE.

Now, the Senate Permanent Investigating Subcommittee has shown in two different reports specific examples of ICE being used especially in the Amaranth case, to manipulate up the price in that case of natural gas. Now Mr. Barton has earlier this morning said, gee, we're worried we're going to have to have Mr. Reid, Sir Robert, who I believe lives in England, how can we get control over ICE? Do we have to have a regulation in London and a regulation in the United States?

Let's remember who ICE is. It is very nice that Sir Robert is here today. Usually Mr. Jeffrey Sprecher or Mr. Vice from Atlanta, Georgia comes to testify before this and other committees. I'm sure it's nice to have Sir Robert here today waving the British flag. ICE is headquartered in Atlanta. Its trading engines are in Chicago. It's trading 30 percent of the West Texas Intermediate benchmark crude oil contract on United States terminals located in the United States and denominated in United States dollars.

Now it is true that the International Petroleum Exchange, when I was at the CFTC, came to us as a London corporation with London crude oil contracts, trading on a London floor, and asked for permission not to register as a full designated contract market because they were truly a foreign entity. And I wrote the template of the letter that approved that. I'm sorry that I did. But our thesis was that it was truly a British corporation. We never envisioned that the International Petroleum Exchange would be bought by the

Atlanta Intercontinental Exchange, which, by the way, people said who are the founders? The founders are Goldman Sachs, Morgan Stanley, British Petroleum and the Flour Corporation. They founded this exchange to be competitive to Mr. Newsome, Dr. Newsome, as a fully regulated exchange operating outside of United States' regulation.

Now the question for this Congress is, can an Atlanta corporation, a headquartered Atlanta corporation, I believe Sir Robert's bosses, trading engines in Chicago, trading 30 percent of our contract, in U.S. denominated dollars, do we have the authority, should we be calling them a foreign corporation? They're not a foreign corporation. It's a United States' corporation by any measure. And so when we ask the question, gee, will this go off to England, this trading? That means will it go off to the Chicago trading engine, not to England.

You have been told there are two major markets. One is Sir Robert's, whose headquarters is in Atlanta and trading engine is in Chicago trading our contract, and the other is Mr. Newsome. This is a United States' market. It makes sense that it's a United States market. We're dealing with West Texas Intermediate petroleum delivered in Cushing, Oklahoma.

Now Mr. Lukken has proudly announced that after negotiations with the Financial Services Authority, by the way, who has two supervisors for these markets, and if you look at it worldwide, it's 50 percent of the futures contracts in the world, two supervisors, they have never brought an enforcement action in the energy futures markets since they came into existence in 1997.

Mr. Lukken has negotiated with the British to regulate what is happening here in the United States, and he has gotten limited conditions. He is going to get some speculation limits. He is going to get some identification. But he isn't going to have the power under section 8, 9 to go to the floor or the headquarters of the Intercontinental Exchange when that market does no longer accurately reflect the forces of supply-demand.

Now if the first panel and the second panel proved anything I believe it is that these markets no longer represent supply-demand and I want to emphasize, I agree, supply-demand is a problem. I don't want to be misunderstood. Supply-demand is a problem. But what we've heard today is there is a speculative premium.

Mr. Stupak has introduced this legislation. This legislation effectively takes us back to December 19, 2000, before the Commodity Futures Modernization Act was passed. There is not a provision in that bill that wasn't the law in 1999. We weren't hearing about skyrocketing oil prices in 1999. In fact, before Mr. Newsome went to NYMEX, I visited NYMEX, and the traders were sitting reading newspapers on the floor. Why? Oil was $15 a barrel. Straight on. No volatility. Each of the things that was talked about today could be taken care of by Mr. Lukken this week. He doesn't need legislation and I can tell you why. If he needs legislation, there are two parallel bills circulating around. One is the appearance of regulation without really providing it, and there are bills in accordance with Chairman Stupak's thing that provide real regulation. You heard about the "end the Enron" loophole. It didn't end the loophole. Please don't take legislation that doesn't fix this problem. I will be happy to answer questions.

[The prepared statement of Mr. Greenberger follows:]

Testimony of

Michael Greenberger
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Before the House Energy and Commerce
Subcommittee on Oversight and Investigations

Regarding

Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II

Monday, June 23, 2008
11:00 a.m.
2123 Rayburn House Office Building

One Page Summary of Testimony

In the face of the American consumer buckling under skyrocketing oil prices, much of the U.S. financial sector determining the price of that oil has escaped meaningful U.S. regulatory oversight.

Over 30% of the U.S. delivered futures benchmark largely determinant of the price of oil here and throughout the world is now being traded on an exchange headquartered in Atlanta, with trading engines in Chicago and trading terminals placed all over the U.S. Relying on an outdated 1999 CFTC staff no action letter granted to a now defunct U.K. subsidiary, the U.S. owned Intercontinental Exchange (ICE) and the CFTC assert that United Kingdom regulators, rather than the U.S. CFTC, should have primary oversight of that exchange. CFTC permission has now also been granted to the Dubai Mercantile Exchange, in partnership with U.S. owned NYMEX, to begin trading that same U.S. delivered contract in the U.S. under the regulatory oversight of the Dubai government, creating the "London/Dubai" Loophole for U.S. speculation.

An ever burgeoning unregulated energy "swaps" market has developed in the U.S. freed from CFTC oversight by the so-called statutory Enron Loophole. Those swaps dealers are laying off their risk from unregulated swaps markets on U.S. regulated exchanges which are treating those dealers, e.g., investment banks, as if they were "physical" commercial hedgers not subject to speculation controls, thereby creating the "Swaps Dealers" Loophole.

The CFTC has within the last week made feints toward closing these exemptions, but it is moving slowly and ineffectively. For example, under intense pressure from Congress, it "negotiated" last week with the U.K. to receive permission to require the U.S. owned ICE to place limits on speculation and provide large trader reporting data pertaining to U.S. delivered crude oil contracts traded on its U.S. trading terminals. However, ICE has been given until September 15, 2008 to comply, a virtual lifetime to the distressed U.S. gas consumer.

In response to CFTC actions, a leading U.K. financial spokesperson called the CFTC's actions "American Imperialism," saying "if a bunch of [S]enators want to get rude about the [UK], that's fine, but don't interfere in *our* market." The U.K.'s FSA now refuses to dismiss the rumor that it will "veto" the CFTC action.

In fact, the CFTC has outsourced oversight of "our" own U.S. oil markets to the U.K., rather than vice versa, as the U.K. now suggests. We have outsourced to a U.K. agency that has not brought a single energy futures enforcement action in its existence, and has only two supervisors monitoring almost 50% of the world's future trades.

If the 2008 PUMP Act becomes law, the U.S. consumer will know precisely the role speculation plays in the massive run up of gasoline, because that statute closes all three major speculation loopholes and brings all U.S. energy futures trading done in and affecting U.S. delivered energy products into the light of day. The only imposition required of speculators is that their trading must be observed by U.S. regulators. Indeed, the 2008 PUMP Act creates a new "U.S. energy consumers" loophole to the massive unpoliced speculation unhinging the market price of oil from its economic bearings.

TABLE OF CONTENTS

Page

One Page Summary of Testimony i

Table of Contents ii

Introduction 1

Summary and Update of Prior Testimony 2

The 2008 PUMP Act Fully and Effectively Closes All Trading Loopholes for Speculators 5

- Completely Closes the Enron Loophole 6
- Makes Clear Energy Swaps Are Futures 6
- Requires Transparency for Energy Index Funds 6
- Nullifies FBOT No-Action Letters 6
- Strengthens Regulated U.S. Exchange Trading of Energy Futures 7
  - Aggregated Speculation Limits 7
  - Provides Clear Oversight of Bilateral Energy Transactions 7
- Provides Strong Oversight of CFTC Exemption Authority 8
- Total Impact of the 2008 PUMP Act 8
- Other Supportive Legislation 8

There Are No Legal Restraints Barring the "Foreign" Impact of Manipulation on U.S. Energy Markets 9

The Intercontinental Exchange Cannot Fairly Be Deemed British for Purposes of Trading U.S. Delivered Petroleum Futures in U.S. Dollars on U.S. Trading Terminals 11

The CFTC Has Consistently Viewed Foreign Exchange Trading on U.S. Terminals Subject to Full U.S. Regulation 12

Page

Efforts Designed to Oversee and Improve the Foreign Regulation of U.S. Delivered Futures on U.S. Terminals May Not Effectively Close the "London/Dubai" Loophole 15

CFTC's New Regulatory Requirements for "Foreign" Boards of Trade with U.S. Terminals 16

The CFTC's New Regulatory Approach for FBOT U.S. Terminal Trading Falls Short of That Needed to Drive Excessive Speculation from U.S. Energy Futures Markets 19

The Lack of Effective Emergency Authority to Intervene in Market Distortions 20

Deferring to Foreign Regulators Undercuts the Self Regulatory and Surveillance Requirements of U.S. Law 23

Introduction

My name is Michael Greenberger.

I want to thank the subcommittee for inviting me to testify on the important issue that is the subject of today's hearings.

After 25 years in private legal practice, I served as the Director of the Division of Trading and Markets ("T&M") at the Commodity Futures Trading Commission ("CFTC") from September 1997 to September 1999. In that capacity, I supervised approximately 135 CFTC personnel in CFTC offices in DC, New York, Chicago, and Minneapolis, including lawyers and accountants who were engaged in overseeing the Nation's futures exchanges. During my tenure at the CFTC, I worked extensively on, *inter alia*, regulatory issues concerning exchange traded energy derivatives, the legal status of over-the-counter ("OTC") energy derivatives, and the CFTC authorization of trading of foreign exchange derivative products on computer terminals in the United States.

While at the CFTC, I also served on the Steering Committee of the President's Working Group on Financial Markets ("PWG"). In that capacity, I drafted, or oversaw the drafting of, portions of the April 1999 PWG Report entitled "Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management," which recommended to Congress regulatory actions to be taken in the wake of the near collapse of the Long Term Capital Management (LTCM) hedge fund, including Appendix C to that report which outlined the CFTC's role in responding to that near collapse. As a member of the International Organization of Securities Commissions' ("IOSCO") Hedge Fund Task Force, I also participated in the drafting of the November 1999 report of IOSCO's Technical Committee relating to the LTCM episode: "Hedge Funds and Other Highly Leveraged Institutions."

After a two year stint between 1999 and 2001 as the Principal Deputy Associate Attorney General in the U.S. Department of Justice, I began service as a Professor at the University of Maryland School of Law. At the law school, I have, *inter alia*, focused my attention on futures and OTC derivatives trading, including academic writing and speaking on these subjects. I currently teach a course that I designed entitled "Futures, Options, and Derivatives," in which the United States energy futures trading markets are featured as a case study of the way in which unregulated or poorly regulated futures and derivatives trading cause dysfunctions within those markets and within the U.S. economy as a whole. One result of this dysfunction, as I describe to my students, is the needlessly high prices which energy consumers now pay because of the probability of excessive speculation, illegal manipulation, and fraud within those markets.

The question whether there has been manipulation of U.S. energy futures markets in general, and U.S. delivered crude oil contracts specifically, has been the subject of many hearings. I have previously testified at four of those hearings, the most recent held on June 3, 2008 before the United States Senate Committee on Commerce, Science and Technology. To put the issue of today's hearing in context, I summarize and update the points I made at that hearing immediately below.

Summary and Update of Prior Testimony

One of the fundamental purposes of futures contracts is to provide price discovery in the "cash" or "spot" markets. Those selling or buying commodities in the "spot" markets rely on futures prices to judge amounts to charge or pay for the delivery of a commodity.[1] Since their creation in the agricultural context decades ago, it has been widely understood that, unless properly regulated, futures markets are easily subject to distorting the economic fundamentals of price discovery (*i.e.*, cause the paying of unnecessarily higher or lower prices) through excessive speculation, fraud, or manipulation.[2]

The Commodity Exchange Act ("CEA") has long been judged to prevent those abuses. Accordingly, *prior* to the hasty and last minute passage of the Commodity Futures Modernization Act of 2000 ("CFMA"), "all futures activity [was] confined by law (and eventually to criminal activity) to [CFTC regulated] exchanges alone."[3] At the behest of Enron, the CFMA authorized the "stunning" change to the CEA to allow the option of trading energy commodities on deregulated "exempt commercial markets," *i.e.*, exchanges exempt from CFTC, *or any other* federal or state, oversight, thereby rejecting the contrary 1999 advice of the President's Working Group on Financial Markets, which included the Secretary of the Treasury, the Chairman of the Federal Reserve Board, and the Chairmen of the SEC and CFTC. [4] This is called the "Enron Loophole."

Two prominent and detailed bipartisan studies by the Permanent Subcommittee on Investigations' ("PSI")[5] staff represent what is now conventional wisdom: hedge funds, large banks, pension funds, insurance and energy companies, and wealthy individuals have used "exempt commercial energy futures markets" to drive up needlessly the price of energy commodities over what economic fundamentals dictate, adding, for example, what the PSI estimated to be @ $20-$30 per barrel to the price of a barrel of crude oil.[6] At the time of that estimate, the price of crude oil had reached a then record high of $77. The conclusion that speculation has added a large premium to energy products has been corroborated by many experts, including most recently and most prominently, George Soros,[7] the International Monetary Fund,[8] OPEC, and the International Energy Agency.[9]

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[1] *See* Written Testimony of Professor Michael Greenberger, *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?: Hearing Before the H. Subcomm. on Oversight and Investigations* 3-5 (2007) *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1011&context=cong_test (last visited June 21, 2008).

[2] *See, e.g.*, Jonathan Ira Levy, *Contemplating Delivery: Futures Trading and the Problem of Commodity Exchange in the United States, 1875-1905*, American Historical Review 307 (2006) ("'[T]he man who managed or sold or owned those immense wheat fields has not as much to say with the regard to the price of the wheat that some young fellow who stands howling around the Chicago wheat pit could actually sell in a day.'"(quoting *Fictitious Dealings in Agricultural Products: House Comm. on Agric. Committee Hearing Reports* (1892)).

[3] Philip McBride Johnson & Thomas Lee Hazen, Derivatives Regulation 28 (Cumm. Supp. 2008).

[4] *Id.*; *see also* President's Working Group on Financial Markets, Over-the-Counter Derivatives Markets and the Commodity Exchange Act 16 (1999), *available at* http://www.ustreas.gov/press/releases/reports/otcact.pdf (last visited June 21, 2008) ("Due to the characteristics of markets for non-financial commodities with finite supplies, however, the Working Group is unanimously recommending that the exclusion [from regulation] not be extended to agreements involving such commodities.").

[5] Permanent Subcommittee on Investigations of the Committee on Homeland Security and Governmental Affairs, The Role of Market Speculation In Rising Oil and Gas Prices: A Need to Put the Cop Back on the Beat (June 27, 2006) [hereinafter June 2006 Report]; Permanent Subcommittee on Investigations of the Committee on Homeland Security and Governmental Affairs, Excessive Speculation in the Natural Gas Market, (June 25, 2007) [hereinafter June 2007 Report].

[6] June 2006 Report, *supra* note 5, at 2, 23.

The PSI staff and others have identified the Intercontinental Exchange ("ICE") of Atlanta, Georgia, as an unregulated facility upon which considerable exempt energy futures trading is done.[10] For purposes of facilitating exempt natural gas futures, ICE is deemed a U.S. "exempt commercial market" under the Enron Loophole.[11] For purposes of its facilitating U.S. WTI crude oil futures, the CFTC, by informal staff action, has deemed ICE to be a U.K. entity not subject to direct CFTC regulation even though ICE maintains U.S. headquarters and trading infrastructure, facilitating, *inter*

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[7] *See, e.g.*, Edmund Conway, *George Soros: Rocketing Oil Price is a Bubble*, DAILY TELEGRAPH (May 27, 2008), *available at* http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2008/05/26/cnsoros126.xml (last visited June 21, 2008) (quoting Mr. George Soros as stating "Speculation . . . is increasingly affecting the price"); Written Testimony of Michael Masters, *Hearing Before the Committee on Homeland Security and Governmental Affairs, U.S. Senate* 2 (May 20, 2008), *available at* http://hsgac.senate.gov/public/_files/052008Masters.pdf (last visited June2 1, 2008) (quoting Michael W. Masters as stating "Are Institutional Investors contributing to food and energy price inflation? And my unequivocal answer is YES"); Alejandro Lazo, Energy *Stocks Haven't Caught Up With Oil Prices*, WASH. POST (Mar. 23, 2008), *available at* http://www.washingtonpost.com/wp-dyn/content/article/2008/03/21/AR2008032103825.html (last visited June 21, 2008) (quoting Mr. Fadel Gheit as stating "The largest speculators are the largest financial companies"); MICHELLE FOSS, UNITED STATES NATURAL GAS PRICES TO 2015 34 (2007), *available at* http://www.oxfordenergy.org/pdfs/NG18.pdf (last visited June 21, 2008) (asserting "The role of speculation in oil markets has been widely debated but could add upwards of $20 to the price per barrel"); Advantage Business Media, *Economist Blames Subsidies for Oil Price Hike*, CHEM.INFO (2008), *available at* http://www.chem.info/ShowPR.aspx?PUBCODE=075&ACCT=0000100&ISSUE=0609&ORIGRELTYPE=DM&RELTYPE=PR&PRODCODE=00000&PRODLETT=M&CommonCount=0 (last visited June 21, 2008) (quoting Dr. Michelle Foss as stating "We have an overpriced commodity, and this is going to be around for a while"); Kenneth N. Gilpin, *OPEC Agrees to Increase Output in July to Ease Oil Prices*, N.Y. TIMES (June 3, 2004) *available at* http://www.nytimes.com/2004/06/03/business/03CND-OIL.html?ex=1401681600&en=5dbd50c5b369795b&ei=5007&partner=USERLAND (last visited June 21, 2008) (quoting Mr. Kyle Cooper as stating "There is not a crude shortage, which is why OPEC was so reluctant to raise production."); Upstream, *Speculators 'not to blame' for Oil Prices*, UPSTREAMONLINE.COM, (April 4, 2008), available at http://www.upstreamonline.com/live/article151805.ece (last visited June 21, 2008) (quoting Mr. Sean Cota as stating "It has become apparent that excessive speculation on energy trading facilities is the fuel that is driving this runaway train in crude prices"); Mike Norman, *The Danger of Speculation*, FOXNEWS.COM (Aug. 19, 2005), *available at* http://www.foxnews.com/story/0,2933,166038,00.html (last visited June 21, 2008) (Mr. Norman stating "Oil prices are high because of speculation, pure and simple. That's not an assertion, that's a fact. Yet rather than attack the speculation and rid ourselves of the problem, we flail away at the symptoms.").

[8] INTERNATIONAL MONETARY FUND, REGIONAL ECONOMIC OUTLOOK: MIDDLE EAST AND CENTRAL ASIA 27-28 (2008) ("Producers and many analysts say it is speculative activity that is pushing up oil prices now. Producers in particular argue that fundamentals would yield an oil price of about US $80 a barrel, with the rest being the result of speculative activity."); *see also* Neil King Jr., *Saudi Arabia's Leverage In Oil Market Is Sapped*, WALL STREET J. (June 16, 2008), *available at* http://online.wsj.com/article/SB121355902769475555.html?mod=googlenews_wsj (last visited June 21, 2008) (quoting Saudi Oil Minister Ali Naimi as saying skyrocketing oil prices were "unjustified by the fundamentals" of supply and demand).

[9] In a rare move representatives of the world's largest oil producers and consumers have issued a joint working paper in advance of a joint summit on oil prices yesterday, which calls for worldwide regulation to "tackle issues" and to "improve the transparency and regulation of financial markets though measures to capture more data on index fund activity and to examine cross exchange inter-actions in the crude market." Bernd Radowitz & Reem Shamseddine, *Oil Summit to Take on Speculators*, WALL ST. J. (June 21, 2008), *available at* http://www.moneyweb.co.za/mw/view/mw/en/page94?oid=211868&sn=Detail (last visited June 22, 2008).

[10] *See* June 2007 Report, *supra* note 5, at 27.

[11] *See id.*

alia, @ 30% of trades in U.S. WTI futures.[12] The Dubai Mercantile Exchange, in affiliation with NYMEX, a U.S. exchange, has also been granted permission to trade the U.S. delivered WTI contract on U.S. terminals, but is, by virtue of a CFTC no-action letter, to be regulated by the Dubai Financial Service Authority ("DFSA").[13] NYMEX itself, the U.S. premier regulated energy futures contract market, is reported to be planning to have a London trading platform registered with the U.K.'s FSA,[14] after which it would apply for the foreign board of trade no action relief that has already been granted to ICE and DME. Providing NYMEX's London trading platform with this kind of no action relief would convert full U.S. regulation of the most important crude oil futures contracts to substantial U.K. oversight. These staff informal action letters, effectuating the exemptions for "foreign" owned U.S. trading terminals, by their own terms make it clear that they may be instantly revoked by the CFTC.[15]

One final gap in the oversight of speculation in the U.S. crude oil (and agricultural) markets was illuminated by the testimony of Michael W. Masters, Managing Member of Masters Capital Management, LLC, at a recent May 20 hearing before the Senate Committee on Homeland Security and Government Affairs.[16] Mr. Masters demonstrated that large financial institutions, such as investment banks and hedge funds, which were "hedging" their off exchange futures transactions on energy and agricultural prices on U.S. regulated exchanges, were remarkably being treated by NYMEX, for example, and the CFTC as "commercial interests," rather than as the speculators they self evidently are.[17] By lumping large financial institutions with traditional commercial oil dealers (or farmers)[18] even fully regulated U.S. exchanges were not applying traditional speculation limits to the transactions engaged in by these speculative interests.[19] Mr. Masters demonstrated beyond all doubt that a significant percentage of the trades in WTI futures, for example, were controlled by non-commercial interests.[20] These exemptions from speculation limits for large financial institutions hedging off-exchange "swaps" transactions emanates from a CFTC letter issued on October 8, 1991[21] and have continued through last week.

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[12] *See* Written Testimony of Professor Michael Greenberger, *Energy Market Manipulation and Federal Enforcement Regimes: Hearing before the S. Comm. on Commerce, Science, and Transportation*, 3 (2008), *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1026&context=cong_test (last visited June 21, 2008).

[13] Dubai Mercantile Exchange Ltd., CFTC No-Action Letter, 2007 CFTC Ltr. LEXIS 6 (May 24, 2007).

[14] Jeremy Grant, *Nymex's Long Road to the Electronic Age*, FINANCIAL TIMES (Feb. 17, 2006), at 39 ("Nymex has indicated that it might be forced to move its electronically traded WTI to London so that it can compete on a level playing field with ICE.").

[15] *See* Greenberger, *supra* note 1, at 11-12 (providing a complete discussion of the no-action letter process including termination).

[16] Written Testimony of Michael Masters, *Hearing Before the Committee on Homeland Security and Governmental Affairs, U.S. Senate* (May 20, 2008), *available at* http://hsgac.senate.gov/public/_files/052008Masters.pdf (last visited June 21, 2008).

[17] *Id.* at 7-8.

[18] Gene Epstein, *Commodities: Who's Behind The Boom?*, BARRON'S 32 (March 31, 2008) ("The speculators, now so bullish, are mainly the index funds. . . . By using the [swaps dealers] as a conduit, the index funds get an exemption from position limits that are normally imposed on any other speculator, including the $1 in every $10 of index-fund money that does not go through the swaps dealers.")

[19] Masters, *supra* note 16, at 7.

[20] *Id.* at 8, 11.

[21] J. Aron & Co., CFTC Interpretive Letter, 1991 CFTC Ltr. LEXIS 18 (Oct. 8, 1991).

Virtually all parties now agree the Enron, London/Dubai, and Swaps Dealers Loopholes must be closed. On June 18, 2008, the Food Conservation and Energy Act of 2008[22] (the "Farm Bill") was enacted into law by a Congressional override of President Bush's veto. Title XIII of the Farm Bill is the CFTC Reauthorization Act of 2008, which, in turn, includes a provision that was intended to "close" the Enron Loophole.[23] The provisions, however, did not return to the status quo prior to the passage of the Enron Loophole by bringing *all* energy futures contracts within the full U.S. regulatory format. Instead, the Farm Bill amendment requires the CFTC and the public to prove on a case-by-case basis through administrative proceedings that an *individual* energy contract should be regulated if the CFTC can prove that the contract "serve[s] a significant price discovery function" in order to detect and prevent "manipulation."[24]

It has also been widely reported that the CFTC intends to use the new legislation to demonstrate that only a single unregulated natural gas futures contract, *and not any crude oil futures contracts*, should be removed from the Enron Loophole and become fully regulated. Thus, by CFTC pronouncement, crude oil, gasoline, and heating oil futures contracts will not be covered by the new legislation.

The CFTC has also made it clear that the Farm Bill amendment will not cover any U.S. delivered futures contracts traded on the U.S. terminals of foreign exchanges operating pursuant to staff no action letters. As mentioned above, the Intercontinental Exchange ("ICE") of Atlanta, Georgia, for purposes of facilitating U.S. delivered WTI crude oil futures, is deemed by the CFTC, through an informal staff no action letter, to be a U.K. entity not subject to direct CFTC regulation even though ICE maintains U.S. headquarters and trading infrastructure, facilitating, *inter alia*, @ 30% of trades in U.S. WTI futures. Moreover, the Dubai Mercantile Exchange ("DME"), in affiliation with NYMEX, a U.S. exchange, has also been granted permission to trade the U.S. delivered WTI contract on U.S. terminals, but is, by virtue of a CFTC no action letter, regulated by the Dubai Financial Service Authority ("DFSA"). Again, the CFTC will not rely on the plain language of the Farm Bill amendment to close the "London/Dubai" Loophole.

The "Swaps Dealer" Loophole was only recently brought to the attention of Congress and thus was not addressed by the Farm Bill amendment.

The 2008 PUMP Act Fully and Effectively Closes All Trading Loopholes for Speculators

On June 20, 2008, the Chairman of this Subcommittee, Congressman Bart Stupak, announced the introduction of the Prevent Unfair Manipulation of Prices Act of 2008 ("2008 PUMP Act").[25] The 2008 PUMP Act completely closes the Enron, London/Dubai, and Swaps Dealers Loopholes, requiring all U.S.-delivered futures energy transactions executed in any manner within the U.S. to be traded on U.S. contract markets subject to direct regulation by the CFTC.

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[22] Food Conservation and Energy Act of 2008, Pub. L. No. 110-246, § 13201; 122 Stat. 1651 (2008).

[23] *Id.*

[24] *Id.*

[25] PUMP Act (2008), H.R., 110th Cong., *available at* http://www.house.gov/stupak/pumpbill.pdf.

Completely Closes the Enron Loophole. First, the 2008 PUMP Act would completely reverse the CEA's exemption of energy commodities from U.S exchange trading requirements. The amendment would redefine an "exempt commodity" as a commodity that does not include an agricultural or "*energy* commodity,"[26] thereby bringing all energy futures within the CEA's exchange trading requirement. An energy commodity would include, *inter alia*, crude oil, gasoline, diesel fuel, heating oil, propane, electricity, and natural gas.[27] Under the 2008 PUMP Act, an "included energy transaction" must be fully within CFTC direct supervision pursuant to statutory contract market requirements if the transaction relates to the delivery of U.S. energy futures contracts or if an energy futures trade is conducted on a computer terminal in the U.S.[28] Conversely, energy futures transactions made through terminals outside the U.S. to deliver a futures energy contract outside the U.S. would be exempt from U.S. contract market regulation.[29]

Makes Clear Energy Swaps Are Futures. The 2008 PUMP Act expressly bars over-the- counter (*i.e.*, trading outside of a regulated U.S. contract market) energy futures "swaps" involving transactions of futures energy contracts to be delivered in the U.S. or conducted using computer terminals in the U.S.[30] The combination of statutorily eliminating over the counter energy swaps transactions and requiring that all energy futures contracts delivered or traded in the U.S. be on exchange makes doubly clear that energy futures index funds can only be traded on a U.S. regulated and CFTC overseen U.S. contract market.

Requires Transparency for Energy Index Funds. The 2008 PUMP Act also would require the CFTC to make on its website monthly postings about aggregate numbers and positions of anyone using index funds to trade U.S.-delivered futures energy contracts or trade on U.S. computer terminals.[31]

Nullifies FBOT No Action Letters. The 2008 PUMP Act would nullify all no actions letters previously granted to exchanges trading futures energy contracts to be delivered in the U.S. or using computer terminals in the U.S.[32] A foreign exchange desiring to trade energy futures on U.S. terminals would have to register as a U.S. regulated contract market.[33] The Amendment would provide a six-month grace period for compliance.[34]

Accordingly, the 2008 PUMP Act would require that U.S. energy futures or energy futures traded on U.S. terminals be subject to the essential "core principles" of regulation of U.S. contract markets; each of these core principles are designed to prevent fraud, manipulation and excessive speculation.[35]

These regulatory requirements include: imposition of mandatory speculation limits; regular and reliable large trader reporting to detect immediately excessive speculation, manipulation or fraud; strong contract market self-regulation surveillance systems; and provision for strong CFTC emergency intervention authority to resolve dysfunctions within the energy futures markets.[36] Most of those protections are either not provided for or are not emphasized in the foreign regulatory regimes to which the CFTC has given deference in the no action process. The 2008 PUMP Act would, accordingly, eliminate in the case of ICE, for example, the need to rely on a regulator in London, using less rigorous oversight of the markets, for activity directly and significantly impacting U.S. energy markets, *i.e.*, the trading of over 30% of the critically important U.S. WTI petroleum futures contract.

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[26] *Id.* at § 2(a).
[27] *Id.*
[28] *Id.*
[29] *See id.* at § 2(c).
[30] *Id.* at § 2(b).
[31] *Id.* at § 2(i).
[32] *Id.* at § 2(e)(2).
[33] *Id.*
[34] *Id.*
[35] 7 U.S.C. § 7(a)-(d) (2008).

Strengthens Regulated U.S. Exchange Trading of Energy Futures. But, even more important, the 2008 PUMP Act strengthens those regulatory requirements that now apply to CFTC regulated contract markets engaged in energy futures trading.

Aggregated Speculation Limits. For example, the 2008 PUMP Act requires the CFTC to establish uniform speculation limits for transactions involving U.S.-delivered energy contracts futures or those traded on computer terminals in the U.S. The Commission is required to "fix limits on the aggregate number of positions which may be held by any person" for each month and in *all* markets under CFTC jurisdiction.[37] Under the exiting regulatory regime, speculation limits are only applied by each contract market, and "aggregate positions" are never imposed. This position limit would prevent a trader from spreading speculation over a host of markets, thereby accumulating a disproportionately large share of an energy market while satisfying each exchange's separate limits.

On the other hand, the 2008 PUMP Act would exempt "bona fide hedging transactions" involving U.S.-delivered futures energy contracts or those traded on computer terminals in the U.S.[38] In short, speculation limits would only apply to speculators—not those using the markets to hedge risks involved in selling or buying the energy commodity at issue in the wholesale or retail markets.

Provides Clear Oversight of Bilateral Energy Transactions. The 2008 PUMP Act also would provide special rules for "bilateral included energy transactions," or transactions involving U.S.-delivered futures energy contracts not made through a trading facility.[39] Such bilateral included energy transactions would consist of transactions between two principals, which do not involve communication or negotiation about any of the material economic terms of an energy futures contract. While a source of great concern by industrial users of the energy futures markets for their abusive speculative impact on the markets,[40] these bilateral transactions were not regulated by the Farm Bill amendment. The Stupak legislation would require "eligible contract participants" to provide the CFTC with market data about large trading positions involving principal to principal standardized contracts relating to an energy commodity.[41] Additionally, the CFTC and Department of Justice are given the authority to examine the trading records of "an eligible contract participant that enters into or executes a bilateral included energy transaction."[42] The 2008 PUMP Act should be revised to make it clear that even those standardized bilateral transactions not traded by computer must be traded on a U.S. regulated exchange, because they are properly considered futures contracts however traded.

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[36] For a full discussion of the importance of CFTC emergency powers and self regulatory requirements, see text accompanying notes 118-128 *infra*. Neither the CFTC's new requirements for FBOTs nor any other proposed legislation would afford CFTC emergency oversight of, and self regulation and surveillance on, FBOTs with U.S. trading terminals.

[37] PUMP Act (2008) at § 2(f)(1).

[38] *Id.* at § 2(g).

[39] *Id.* at § 2(h).

[40] *See Excessive Speculation in the Natural Gas Market: Hearing Before the Permanent Subcom. on Investigations of the S. Comm. on Homeland Security & Gov. Affairs* (June 25, 2007), *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1009&context=cong_test (witness questioning by Senators Levin and Coleman).

Provides Strong Oversight of CFTC Exemption Authority. Finally, the 2008 PUMP Act recognizes that the CFTC has, through section 4(c) of the CEA,[43] the power to tailor U.S. futures regulations from "one size fits all" rules by granting exemptions from statutory requirements so long as the exempted trading comes with assurances that there will be no fraud, manipulation, or excessive speculation and that it otherwise serves the public interest. However, to avoid abusive use of that exemption authority, the 2008 PUMP ACT requires the CFTC to provide Congress with two months notice and to otherwise solicit public comment before promulgating a rule that exempts energy futures transactions governed by the 2008 PUMP Act from the requirements of that statute or the CEA in general.[44]

Total Impact of the 2008 PUMP Act. In sum, the 2008 PUMP Act comprehensively closes completely and firmly all of the troublesome loopholes that have been created by the Enron Loophole or by CFTC letter, policy statements, and exemption rules. These deregulatory measures have allowed the U.S. energy futures markets to be overrun by unpoliced speculation, rather than by the commercial interests for which the markets were designed. That uncontrolled speculative activity has unhinged those markets and the price of the underlying commodities from economic fundamentals, and the American consumer has paid an exorbitant speculative premium.

Other Supportive Legislation. It should be noted that there has been legislation introduced in both the House and Senate that are fully consistent with various portions of the 2008 PUMP Act approach. For example, Congressman Van Hollen (D-MD) and Congresswoman DeLauro (D-CT) last week introduced legislation that would completely close the Enron, London/Dubai, and Swaps Dealer Loopholes.[45] Senators Cantwell (D-WA) and Snowe (R-ME) have introduced legislation directed to the London/Dubai Loophole that would require all trading on U.S. platforms to be governed fully and directly by U.S. futures law.[46] Senator Nelson (D-FL) has introduced legislation that would close completely the Enron and Swaps Dealer Loophole.[47]

Senators Lieberman (ID-CT) and Collins (R-ME) have proffered legislation options designed to undercut excessive speculation in these markets through direct and aggregated controls on non-commercial futures traders. One of their proposals would require the CFTC to establish firm and aggregated speculation position limits on all speculative futures trading conducted in the U.S. no matter where the platform on which the trading is geographically located;[48] they have also suggested an absolute bar on futures trading by financial institutions that exceed certain net worth limits, applying that bar, *inter alia*, to off-exchange index funds.[49]

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[41] PUMP Act (2008) at § 2(h)(2).

[42] *Id.*

[43] 7 U.S.C. § 6(c) (2008).

[44] PUMP Act (2008) at § 2(e)(1).

[45] Energy Markets Anti-Manipulation and Integrity Restoration Act, H.R., 110th Cong. (2008).

[46] Policing United States Oil Commodities Markets Act of 2008, S. 3122, 110th Cong. (2008), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:s3122is.txt.pdf (last visited June 21, 2008).

[47] S. 3134, 110th Cong. (2008), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:s3134is.txt.pdf (last visited June 21, 2008).

There Are No Legal Restraints to Barring the "Foreign" Impact of Manipulation on U.S. Markets

Arguments have been advanced that there are legal impediments to the CFTC enforcing U.S. regulatory protections on Foreign Boards of Trade bringing their trading terminals to the U.S. If that argument were correct, it would be an impediment to much that the 2008 PUMP Act and much of the complimentary legislative proposals described above requiring the CFTC to do just that. These arguments are premised upon Section 4 (b) of the Commodity Exchange Act (CEA), which pertains to the regulation of foreign transactions by United States persons. Section 4 (b) provides in part:

> No rule or regulation may be adopted by the Commission under this subsection that (1) requires Commission approval of any contract, rule, regulation, or action of any foreign board of trade, exchange, or market, or clearinghouse for such board of trade, exchange, or market, or (2) governs in any way any rule or contract term or action of any foreign board of trade, exchange, or market, or clearinghouse for such board of trade, exchange, or market.[50]

However, this clause has been construed only to mean that the CFTC does not have jurisdiction over transactions conducted by *foreign* persons in a *foreign* country on a *foreign* board of trade.[51] *Kleinberg v. Bear Stearns*,[52] dealt with a situation where London traders were committing acts of fraud on a London exchange.[53] In that case, the Court held that the CFTC did not have enforcement jurisdiction, but explained, "It has been consistently held, at least implicitly, that CFTC may regulate and prosecute those who practice fraud in the United States in connection with commodities trading on foreign exchanges."[54]

To similar effect is the recent case of *Mak v. Wocom Commodities*,[55] concerning a Hong Kong resident placing futures trades with the defendant commodity brokers, both of which are Hong Kong corporations (Wocom).[56] The claims were denied because they were not sufficiently particularized.[57] However, the court stated that jurisdiction would have been extended if it had been clearly shown that there was "particularized harm to our domestic markets."[58] With ICE we currently have trading by U.S. customers in U.S. denominated currency on U.S. terminals in the foremost benchmark U.S. crude oil futures contracts with substantial evidence demonstrating "particularized harm to our domestic markets."

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[48] Discussion Draft to establish aggregate speculative position limits (2008), *available at* http://hsgac.senate.gov/public/_files/aggspeclimits.pdf (last visited June 21, 2008).

[49] Discussion Draft to prohibit the purchase of certain commodity futures contracts and financial instruments and physical commodities by certain investors (2008). *available at* http://hsgac.senate.gov/public/_files/instinvestlimits.pdf (last visited June 21, 2008).

[50] 7 U.S.C. § 6(b) (2008).

[51] PHILIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION 988 (2004 ed.).

[52] 1985 WL 1625 (1985).

[53] *Id.* at 1.

[54] *Id.* at 2 (internal citations omitted).

[55] 112 F.3d 287 (7th Cir. 1997).

[56] *Id.* at 288.

[57] *Id.* at 290-91.

Indeed these cases are consistent with a fundamental tenet of federal financial enforcement jurisprudence that federal financial regulatory jurisdiction extends even to wholly foreign transactions when domestic financial markets suffer "from the effects of [an] improper foreign transaction[.]"[59] The leading commentators on U.S. derivatives regulation have, accordingly stated: "[E]ven without substantial activity in the United States, jurisdiction will exist when conduct abroad has a substantial affect upon U.S. markets and U.S. investors."[60]

Confirmation of this broad sweep of U.S. jurisdiction to address overseas malpractices significantly impacting U.S. markets is evidenced most clearly by the *Sumitomo* case.[61] In that case, the CFTC's enforcement division reached a settlement agreement with a Japanese corporation upon determining that the Japanese head copper trader of the Sumitomo Corporation manipulated the price of U.S. copper almost exclusively through trading done in London on the London Metals Exchange.[62] The CFTC imposed $150 million in fines and restitution.[63] Only a small portion of the trading was done in the U.S. and the London Metals Exchange contact with the U.S. was limited to a U.S. warehouse.[64] Despite these limited U.S. contacts, "the penalty [assessed was] *the largest ever levied by a U.S. Government agency*," and it was widely recognized that the settlement indicated that "manipulation of any commodity traded in the [U.S.] could be the subject of a C.F.T.C. action, *even if no acts were committed in this country.*"[65]

Clearly, then, trading done on trading platforms within the U.S. would be subject to full CFTC regulatory authority. The fact that ICE is headquartered in Atlanta with its trade matching engines in Chicago and controls through its U.S. terminals over 30% of the lead U.S.-delivered petroleum contract only makes the jurisdictional question that much easier. The same is true of the Dubai exchange that partners with U.S.-based NYMEX to trade WTI contracts on U.S. terminals; and the prospect of NYMEX opening a London trading platform for its energy futures products, but escaping U.S. regulation for that trading through a staff no action letter treating NYMEX as if it were a U.K. entity.

Even more important, *Sumitomo* and its progeny are an answer to those many threats levied by large U.S. financial institutions that assert, if their trading on "foreign" trading terminals located in the U.S. is regulated, they will simply move that trading abroad. To be clear, any trading done in the U.S. on foreign exchanges is *a fortiori* covered by the applicable U.S. commodity laws.[66] So when the threat is made that the U.S. institutions will trade abroad, it means that it will be done completely outside of the sovereign U.S. However, the *Sumitomo* line of cases make clear that the CFTC, and for that matter, United States Department of Justice for purposes of related criminal prosecution,[67] can enforce violations of U.S. laws abroad if U.S. markets are significantly impacted by the wrongdoing in foreign countries. In short, speculators cannot escape the reach of U.S. civil and criminal law if they cause price distortions in U.S. commodity markets.

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[58] *Id.* at 291.

[59] Des Brisay v. Goldfield Corp., 549 F.2d 133, 135 (9th Cir. 1977) (citing Schoenbaum v. Firstbrook, 405 F.2d 200, 206 (2d Cir. 1968), *modified in other respects*, 405 F.2d 215 (in banc), *cert. denied*, 395 U.S. 906, 89 S. Ct. 1747, 23 L. Ed. 2d 219 (1969)).

[60] JOHNSON & HAZEN, *supra* note 51, at 984.

[61] In the Matter of Sumitomo Corporation, 1998 CFTC LEXIS 96 (1998).

[62] *Id.* at 2-3.

[63] *Id.* at 24-25.

[64] *Id.* at 11-14.

[65] Floyd Norris, *The Markets; A Record Penalty of Sumitomo, a Lesson on Market Volatility*, N.Y. TIMES, (May 12, 1998), at D13 (emphasis added).

Moreover, as I have testified elsewhere, no exchange, wherever located, can develop liquidity in and maximize profits from trading U.S. delivered futures products without having a substantial U.S. presence.[68] This is evidenced by the 18 CFTC staff no action letters issued to foreign exchanges from all over the world allowing the placement of trading terminals in the U.S. [69] In short, the threat that trading in U.S. delivered commodities will be done exclusively abroad is idle when confronted by both economic and legal realities.

The Intercontinental Exchange Cannot Fairly Be Deemed British for Purposes of Trading U.S. Delivered Petroleum Futures in U.S. Dollars on U.S. Trading Terminals

Of course, all of the above jurisdictional analysis assumes that ICE (and DME) are "foreign" boards of trade. While ICE has a London office, that office is controlled by ICE's headquarters in Atlanta; ICE's trading engines are in Chicago; it is trading over 30% of the U.S. premier crude oil futures contract in U.S. denominated currency. ICE's non-petroleum products, i.e., natural gas futures contracts, are clearly traded within U.S. jurisdiction and are subject to re-regulation under U.S. law by virtue of the Farm Bill's "End the Enron Loophole" provision.[70] ICE also owns a fully regulated U.S. exchange: formerly the New York Board of Trade (NYBOT); now ICE Futures U.S. It defies all logic that such an exchange can be called "foreign" based on the name given to its subsidiary (ICE Futures Europe) and maintaining a London office that could as easily be operated out of the U.S.

The same is also true of the Dubai Mercantile Exchange. Its principal partner is the New York Mercantile Exchange (NYMEX), a U.S. regulated exchange and a U.S. entity. The

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[66] JOHNSON & HAZEN, *supra* note 51, at 984.

[67] *See* Press Release, Department of Justice, U.S. Charges 47 After Long-Term Undercover Investigation Involving Foreign Exchange Markets, (Nov. 19, 2003), *available at* http://www.fbi.gov/dojpressrel/pressrel03/wooden111903.htm (last visited June 20, 2008).

[68] Written Testimony of Professor Michael Greenberger, *Energy Market Manipulation and Federal Enforcement Regimes: Hearing Before the United States Senate Committee on Commerce, Science, and Transportation*, 12 (2008), *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1026&context=cong_test (last visited June 20, 2008).

[69] U.S. Commodity Futures Trading Commission, Foreign Boards of Trade Receiving Staff No Action Letters Permitting Direct Access from the U.S., *available at* http://services.cftc.gov/sirt/sirt.aspx?Topic=ForeignTerminalRelief (last visited June 20, 2008).

[70] Food Conservation and Energy Act of 2008, Pub. L. No. 110-246, § 13201; 122 Stat. 1651 (2008); Jessica Marron, *House and Senate Lawmakers Move to Close 'Enron Loophole' with Amendment to Farm Bill*, PLATTS GLOBAL POWER REPORT, (May 1, 2008) (stating that the "initial target of the [the Farm's Bill End the Enron Loophole Provision] is ICE's financially settled Henry Hub swap contract").

President of NYMEX sits on DME's board. DME has authority to trade the U.S. delivered WTI contract on trading terminals in the U.S. Under these circumstances, DME is clearly a U.S. exchange

The absurdity of the abuse of the FBOT staff no action process is highlighted by recent reports concerning NYMEX. It is widely reported that NYMEX, a U.S. regulated exchange headquartered in the U.S., wants to establish a London futures trading platform that will apply for FSA approval to operate under the United Kingdom's regulatory regime and then apply for an FBOT staff no action letter to allow trading within the U.S. on its NYMEX London platform. Doubtless WTI will be traded on that platform and NYMEX will then have converted itself from a U.S. entity into a British entity with principal regulation in the hands of the United Kingdom.

And, why should NYMEX not do this? It is following precisely the ICE template. However, the proposal defies all good sense, and, even worse, it will add darkness to the trading markets that affect the price of crude oil, gasoline, and heating oil within the U.S.

Under the ICE, DME and London/NYMEX scenarios, each of these exchanges are clearly U.S. exchanges and their trading terminals should be regulated as U.S. regulated contract markets. Moreover, as U.S. contract markets, they and the traders on those exchanges (no matter whether they trade in the U.S. or abroad) are fully subject to both CFTC civil jurisdiction and United States federal criminal statutes.[71] For example, in *Tamari v. Bache*[72] the Seventh Circuit held there was federal jurisdiction to enforce the Commodity Exchange Act, even though the trader and the trader's broker accused of fraud were both situated in Lebanon,[73] by stating: "that Congress intended to proscribe fraudulent conduct associated with any commodity future transactions executed on a domestic exchange, regardless of the location of the agents that facilitate the trading" and thus there was jurisdiction.[74]

The CFTC Has Consistently Viewed Foreign Exchanges Trading on U.S. Terminals Subject to Full U.S. Regulation

It has been shown above, that as a legal matter there is no bar either within the CEA as now drafted nor within the case law that prevents the CFTC from gaining full regulatory control, not only over any futures trading done in the U.S., but futures trading done anywhere in the world that significantly and adversely impacts U.S. markets. Even if one were to assume that ICE, for example, is truly a foreign board of trade, Section 4 (b) only bars regulation of trading done by foreign citizens in foreign countries trading foreign commodities on foreign exchanges when such trading does not cause substantial dysfunctions to U.S. markets. Below it is shown that this well established law has governed the FBOT staff no action process since its inception.

The staff no action process initiated in 1999 was not developed under a view that, pursuant to Section 4 (b), the CFTC could not regulate foreign exchanges who wished to put trading terminals in the U.S. To the contrary, the history is clear that those foreign exchanges themselves recognized that, in the absence of an exemption under Section 4 (c) of the CEA,[75] they would have to fully register as a U.S. contract market. As their plain language made clear when they were first issued in 1999, the FBOT no action letters originated from a rulemaking proceeding that, by its very terms, indicated that permission to put terminals in the U.S. derived from Section 4 (c)'s exemption from full regulation and not from Section 4 (b)'s absolute bar against foreign regulation.[76] It must be remembered that Section 4 (b) does not countenance exceptions to its general restriction. The no action letters include a myriad of regulatory conditions on the foreign boards of trade that are completely inconsistent with the absolute bar within Section 4 (b).[77]

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[71] JOHNSON & HAZEN, *supra* note 51, at 986 (citing In the Matter of Ralli Brothers Bankers, [1986-1987 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 23, 314 (1986)).
[72] 730 F.2d 1103 (7th Cir. 1984).
[73] *Id.* at 1104-05.
[74] *Id.* at 1108; JOHNSON & HAZEN, *supra* note 51, at 987.

If there were any doubt about the above analysis, it was belied by the actions of the CFTC on June 17, 2008, when it added four new conditions to the existing ICE Futures Europe no action letter.[78] While these additional conditions have only been applied to ICE, Acting Chairman Lukken's related comments show that the CFTC has the authority to incorporate them in the now outstanding 14 other FBOT staff no action letters affecting every foreign board of trade with U.S. terminals, as well as any FBOT that seeks an exemption in the future.[79] If Section

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[75] Written Testimony of Professor Michael Greenberger, *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?: Hearing Before the H. Subcomm. On Oversight and Investigations*, 14-15 (2007), *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1011&context=cong_test (last visited June 20, 2008).

[76] *See* LIFFE Administration & Management, CFTC No-Action Letter, 1999 CFTC Ltr. LEXIS 38, 4-5 (July 23, 1999); Access to Automated Boards of Trade (proposed rules), 64 Fed. Reg. 14,159, 14,174 (Mar. 24, 1999). As the proposed rules explained,

> Section 4(c) of the Act provides the Commission with authority "by rule, regulation, or order" to exempt "any agreement, contract or transaction" from the requirements of Section 4(a) of the act if the Commission determines that the exemption would be consistent with the public interest, that the contracts would be entered into solely by appropriate persons and that the exemption would not have a material adverse effect on the ability of the Commission or any contract market to discharge its regulatory or self-regulatory duties under the Act. *Id.* (internal citations omitted).

[77] Among the conditions present in all of the no action letters are the following: the exchange will satisfy the appropriate designation in its home jurisdiction, the exchange must work to ensure fair markets that prohibit fraud and other abuses by providing adequate supervision, continued adherence to IOSCO Principles for Oversight of Screen-Based Trading Systems for Derivative Products, members and guaranteed customers will only receive direct access if a clearing member guarantees and assumes all financial liability, there are sufficient safeguards to prevent unauthorized access or trading, at the Commission's request recipients will provide market information including access to books and records, and will submit all contracts to be made available through the no-action process, the volume of said trades and a list of names and addresses of all those using these exchanges. *See, e.g.,* LIFFE Administration and Management, CFTC No-Action Letter, 1999 CFTC Ltr. LEXIS 38, 65-72 (July 23, 1999); IPE, CFTC No-Action Letter, 1999 CFTC Ltr. LEXIS 152, 58-66 (Nov. 12, 1999); Dubai Mercantile Exchange Ltd., CFTC No-Action Letter, 2007 CFTC Ltr. LEXIS 6, 87-96 (May 24, 2007).

[78] Amendment to No-Action Letter Issued to the International Petroleum Exchange of London (now ICE Futures Europe), CFTC No-Action Letter, (June 17, 2008), *available at* http://www.cftc.gov/stellent/groups/public/@lrlettergeneral/documents/letter/08-09.pdf (last visited June 20, 2008); Press Release, CFTC, CFTC Conditions Foreign Access on Adoption of Position Limits on London Crude Oil Contract (June 17, 2008) *available at* http://www.cftc.gov/newsroom/generalpressreleases/2008/pr5511-08.html (last visited June 20, 2008).

[79] Press Release, CFTC, CFTC Conditions Foreign Access on Adoption of Position Limits on London Crude Oil Contract (June 17, 2008) *available at* http://www.cftc.gov/newsroom/generalpressreleases/2008/pr5511-08.html (last visited June 19, 2008). As Acting Chairman Lukken stated,

> These new conditions for foreign access will provide the CFTC with additional oversight tools to monitor linked contracts. This powerful combination of enhanced trading data and additional market controls will help the CFTC in its surveillance of regulated domestic exchanges, while preserving the important benefits

4 (b)'s absolute prohibition were applicable to FBOTs with U.S. terminals, as some have argued as a predicate to limited legislative or administrative action in this area, how could the CFTC add these new conditions to the outstanding no action letters? Those new conditions, *inter alia*, require large trader reporting and the imposition of speculation limits.[80] The failure of the FBOTs to comply could result in the revocation of the no action letters, thereby requiring each FBOT to register as a fully regulated U.S. contract market.[81]

Those who would attempt to limit Congressional and regulatory controls on ICE, DME, and NYMEX/London have also found comfort in a November 2006 policy statement issued by the CFTC on the FBOT no action letter process.[82] Much is made that Section 4 (b) is cited and quoted therein. Whatever the purpose of that reference, the assertion that 4 (b) presents an absolute bar is belied by the following within that policy statement:

> [i]n the absence of no-action relief, a board of trade, exchange or market that permits direct access by U.S. persons might be subject to Commission action for violation of, among other provisions, section 4(a) of the CEA, if it were not found to qualify for the exclusion from the DCM designation or DTEF registration requirement.[83]

In short, the failure to gain no action relief would mean that, in the absence of registration as a fully regulated contract market, the FBOT would have to remove its U.S. terminals. As the CFTC expressly stated in its June17, 2008 letter to ICE imposing the new conditions on its no action status, if ICE satisfies the four new conditions, the CFTC "will not recommend that the Commission institute enforcement action against [ICE] based upon [ICE's] failure to seek contract market designation or registration as a DTEF under Sections 5 and 5a of the Act".

Again, the action of the CFTC adding further conditions to the ICE no action letter, including large trader reporting and speculation limits, upon pain of an enforcement proceeding based on the failure to register as a U.S. regulated contract market, clearly demonstrates that the CFTC meant what it said in the above quoted reference from its 2006 policy statement, it has broad powers to require a "foreign" exchange to fully register in the U.S. or terminate its presence in this country.[84] Section 4 (b) provides no impediment to those powers.

> of our international recognition program that has enabled proper global oversight during the last decade. This raises the bar for all future foreign access requests and will ensure uniform oversight of linked contracts. *Id.*

[80] Amendment to No-Action Letter Issued to the International Petroleum Exchange of London (now ICE Futures Europe), CFTC No-Action Letter, (June 17, 2008) *available at* http://www.cftc.gov/stellent/groups/public/@lrlettergeneral/documents/letter/08-09.pdf (last visited June 20, 2008).

[81] *See supra* notes 77-79 and accompanying text.

[82] Boards of Trade Located Outside of the United States and No-Action Relief from the Requirement to Become a Designated Contract Market or Derivatives Transaction Execution Facility, 71 Fed. Reg. 64,443 (Nov. 2, 2006).

[83] *Id.* at 64,445 n.23.

[84] Amendment to No-Action Letter Issued to the International Petroleum Exchange of London (now ICE Futures Europe), CFTC No-Action Letter, (June 17, 2008) *available at* http://www.cftc.gov/stellent/groups/public/@lrlettergeneral/documents/letter/08-09.pdf (last visited June 20, 2008).

Efforts Designed to Oversee and Improve the Foreign Regulation of U.S. Delivered Futures on U.S. Terminals May Not Effectively Close the "London/Dubai" Loophole

On June 12, 2008, S. 3130, the "Increasing Transparency and Accountability in Oil Prices Act of 2008" was introduced.[85] S. 3130 ratchets up the CFTC's oversight of foreign boards of trade energy futures contracts on U.S. trading terminals ("FBOTs"), but leaves primary and direct enforcement and oversight in the hands of the foreign regulator, *e.g.*, the U.K.'s Financial Services Authority (FSA) in the case of ICE.[86]

It is my understanding that S. 3130's deference to the primacy of foreign regulators to oversee U.S. terminals operated by FBOTs in the U.S. emanates from a concern that section 4 (b) of the Act bars U.S. regulation of even those FBOTs in the U.S.[87] As has been shown above,[88] section 4 (b), whatever it means, is an absolute bar to regulation.[89] Because S. 3130 increases the existing CFTC regulation of FBOTs, it would run afoul of the absolute bar in Section 4 (b) if that provision did apply to U.S. trading terminals. However, as shown above,[90] section 4 (b)'s bar only applies to foreign trades on foreign exchanges of foreign commodities not having a significant impact on U.S. markets. Therefore, policy concerns about section 4 (b) should not govern the regulation of FBOT terminals in the U.S., especially when those terminals trade U.S. delivered futures contracts; and even more especially when the FBOTs institutional ties are so closely affiliated with the U.S. and U.S. institutions that the FBOT loses all claim to foreign status.

S. 3130 is a major improvement of what had been the CFTC's oversight of FBOTs' U.S. terminals. However, perhaps because of concerns about the impact of Section 4 (b), this legislation is not as comprehensive, for example, as the 2008 PUMP Act discussed above.[91]

S. 3130 affords the CFTC the authority to enforce the prohibitions of section 9 of the Act, concerning criminal penalties, including anti-manipulation prohibitions therein, and "to limit, reduce, or liquidate any position" on the FBOT in aid of preventing, *inter alia*, manipulation and excessive speculation enforcement.[92] Imposition of restrictions on the FBOT, however, must be preceded by consultation with the FBOTs foreign regulator.[93]

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[85] S. 3130, 110th Cong. (2008), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:s3130is.txt.pdf.

[86] S. 3130's other provisions would increase CFTC enforcement staff; make the Inspector General of the CFTC independent of the CFTC Chairman; and have the Comptroller General complete a study within 120 days of the international practices for regulating energy commodity markets. *See id.* at §§ 3-5. The legislation also calls upon the CFTC to collect data on index traders and swaps dealers activities in the energy markets to insure. *See id.* at § 8. The data collection is designed to reexamine hedging exemptions granted to swaps dealers in these markets so as to free them from speculation limits. Unlike the 2008 PUMP Act, S. 3130 does not afford the CFTC direct jurisdiction regarding over-the-counter swaps trading and index funds, which are now excluded from regulation by the Commodity Futures Modernization Act of 2000. *See supra* notes 16-21 and accompanying text.

[87] *See supra* notes 50-51 and accompanying text.

[88] *See supra* notes 52-69 and accompanying text.

[89] *See supra* notes 52-69 and accompanying text.

[90] *See supra* note 51 and accompanying text.

[91] *See supra* notes 25-44 and accompanying text.

[92] *See* S. 3130 at §7.

[93] *See id.*

The CFTC "may apply such recordkeeping requirements [to the FBOT] as the Commission determines are necessary,"[94] and before the CFTC exempts an FBOT from full U.S. contract market regulatory requirements, it must ensure that the FBOT operating the U.S. terminals "appl[y] comparable principles" to those of the CFTC for "daily publication of trading information and position limits or accountability levels for speculators" and provides to the CFTC "the information that the [CFTC] determines necessary to publish a Commitment of Traders report" for U.S regulated contract markets.[95]

S. 3130 requires the CFTC to conduct a review of FBOT no action status for existing FBOTs between the first anniversary of the passage of S. 3130 and one and one half years thereafter to ensure FBOT compliance with the new statutory requirements imposed by this legislation.[96] This provision creates an ambiguity that may lead to the conclusion that the requirements of S. 3130 would not be enforced until this review takes place beginning one year after enactment.

In sum, S. 3130 requires the CFTC to ensure that FBOTs develop large trading reporting and speculation limits, and that they collect such other data as the CFTC deems necessary. The CFTC can bring enforcement actions for, *inter alia*, manipulation after consulting with the foreign regulator.

For all other purposes, S. 3130 leaves in place the foreign regulator as having direct oversight and enforcement responsibility for the supervision of the FBOTs' terminals within the U.S. for those many matters that fall short of manipulation, *e.g.*, insuring that the foreign exchange has an aggressive surveillance infrastructure.[97] Therefore, as will be shown below, critically important aspects of U.S. contract market regulation, especially the power to intervene directly in markets when emergencies exist so as to, *e.g.*, adjust margins and position limits,[98] will not be applied to the FBOT U.S. terminals trading U.S. delivered energy futures contracts.

In any event, recent actions taken by the CFTC to increase regulation of ICE put the requirements of S. 3130 in a new context.

CFTC's New Regulatory Requirements for Foreign Boards of Trade with U.S. Terminals

For at least two years prior to May 20, 2008, the CFTC had repeatedly assured Congress and market participants that the dramatic rise in crude oil, natural gas, gasoline, heating oil, and agricultural products is caused exclusively by supply/demand market fundamentals.[99] The CFTC had based its conclusions on its "exhaustive" research of all relevant market data.[100]

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[94] *Id.*

[95] *Id.* at §6.

[96] *Id.* at §11.

[97] 7 U.S.C. §§ 7(d)(2), (4); 7 U.S.C. §§ 7a(d)(2), (4).

[98] *See infra* notes 118-128 and accompanying text.

[99] Walt Lukken, Acting Chairman, CFTC, Prepared Remarks: Compliance and Enforcement in Energy Markets-- The CFTC Perspective (Jan. 18, 2008), *available at* http://www.cftc.gov/stellent/groups/public/@newsroom/documents/speechandtestimony/opalukken-34.pdf (last

Indeed, as recently as May 20, 2008, before the full Senate Homeland Security and Government Affairs Committee, the CFTC's Mr. Harris, testified: "[A]ll the data modeling and analysis we have done to date indicates there is little economic evidence to demonstrate that prices are being systematically driven by speculators in these [agriculture and energy] markets.... [O]ur *comprehensive* analysis of the *actual* position data of these traders fails to support [the] contention" that there is excessive speculation or manipulation.[101] Rather, he said "prices are being driven by powerful economic fundamental forces and the laws of supply demand."[102]

In a rather dramatic about face, the CFTC suddenly announced on May 29, 2008 (or just nine days after Mr. Harris testimony) that that agency is in the midst of an investigation into the crude oil energy markets[103] and it will now begin to collect substantial amounts of new data to determine what is undergirding high oil prices.[104] This reversal in course is almost certainly the product of intense pressure placed on the CFTC by Congress to ensure that excessive speculative activity and perhaps even manipulation is not being conducted on the principal market over

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visited June 21, 2008) (quoting Mr. Walter Lukken "While speculators play a integral role in the futures markets, the report concludes that speculative buying, as a whole, does not appear to drive up price"); Tina Seeley, *Energy Market Not Manipulated, U.S. Regulator Says (Update1),* BLOOMBERG.COM (May 7, 2008), *available at* http://www.bloomberg.com/apps/news?pid=20601072&sid=aX0iaEd9bOMU&refer=energy (last visited June 21, 2008) (quoting Mr. Walter Lukken, "We have not seen that speculators are a major factor in driving these prices"); Ian Talley & Stephen Power, *Regulator Faults Energy-Futures Proposal*, WALL ST. J. (May 8, 2008) (stating that Mr. Walter Lukken commented that his agency hadn't seen evidence indicating that speculators are "a major factor" in driving up oil prices); Oral Testimony of Walter L. Lukken, Commissioner, CFTC, *Before the Committee on Agriculture, U.S. House of Representatives*, (April 27, 2006) (quoting Mr. Walter Lukken "[B]ased on our surveillance efforts to date, we believe that crude oil and gasoline futures markets have been accurately reflecting the underlying fundamentals of these markets"); Sharon Brown-Hruska, Chairman, CFTC, Address before the International Monetary Fund: Futures Markets in the Energy Sector (Jun. 15, 2006), *available a*t http://www.cftc.gov/newsroom/speechestestimony/opabrownhruska-46.html (last visited Jun. 21, 2008) (stating "To date, the staff' findings have shown that these large speculators as a group tend to inject liquidity into the markets rather than having an undue impact on price movements"); Sharon Brown-Hruska, Chairman, CFTC, Keynote Address at the Managed Funds Association Annual Forum (Jun. 25, 2005), *available at* http://www.cftc.gov/opa/speeches05/opabrownhruska34.htm (last visited June 21, 2008) (stating the CFTC's study of the role of managed funds in our markets, "[C]ontradicts with force the anecdotal observations and conventional wisdom regarding hedge funds and speculators, in general.").

[100] *See, e.g., supra* note 99 and accompanying text.

[101] Written Testimony of Jeffrey Harris, Chief Economist, CFTC, *Before the Senate Committee on Homeland Security and Governmental Affairs, United States Senate* 20 (2008), *available at* http://www.cftc.gov/stellent/groups/public/@newsroom/documents/speechandtestimony/ocajeffharristestimony052008.pdf (last visited June 21, 2008).

[102] *Id.*; *see, e.g.*, Richard Hill, *Lieberman Says He Will Consider Legislation to Address Commodity Prices*, 40 BUREAU OF NAT'L. AFF. 21 (May 26, 2008) (emphasis added), *available at* http://corplawcenter.bna.com/pic2/clb.nsf/id/BNAP-7EVTDG?OpenDocument (last visited June 21, 2008).

[103] CFTC Commissioner Bart Chilton has acknowledged that the public announcement within the May 29 release raises the specter that "some people [will] head for the paper shredder [.]" Tina Seeley, *CFTC Targets Shipping, Storage in Oil Investigation (Update2)*, BLOOMBERG.COM (May 30, 2008), *available at* http://www.bloomberg.com/apps/news?pid=20601087&sid=aGzRMmD_b9MA&refer=home (last visited June 21, 2008).

[104] Press Release, U.S. Commodity Futures Trading Commission, CFTC Announces Multiple Energy Market Initiatives (May 29, 2008), *available at* http://www.cftc.gov/newsroom/generalpressreleases/2008/pr5503-08.html (last visited June 21, 2008).

which the CFTC has declined primary responsibility, i.e., trading done on ICE and on ICE's U.S. terminals.[105]

As crude oil and gas prices continued to spike even after the CFTC's May 29, 2008, announcement, the pressure on the CFTC did not let up.[106] Thus, by June 17, 2008, the CFTC once again ratcheted up pressure on ICE.

In a dramatic June 17, 2008 letter to ICE, the CFTC Director of Market Oversight referenced the fact that ICE had moved its trading platform from London "to the ICE Platform operated by [ICE] in Atlanta, Georgia," and that that U.S. platform was now trading three U.S. delivered energy futures products (WTI, heating oil, and gasoline) "each of which is cash-settled on the price of physically-settled contracts traded on NYMEX."[107] Most importantly, the June 17 letter to ICE then stated:

> A foreign board of trade listing for trading a contract which settles on the price of a contract traded on a CFTC-regulated exchange *raises very serious concerns* for the Commission. . . . In the absence of preventive measures at [ICE], this circumstance *could compromise the [CFTC's] ability to carry out its market surveillance responsibilities*, as well as the integrity of prices established on CFTC-regulated exchanges. . .[T]he division retains the authority to condition further, modify, suspend, terminate, or otherwise restrict the terms of the no-action relief provided herein, in its discretion.[108]

In order to address the CFTC's "very serious concerns" that it had "compromise[d] [its own] ability to carry out its market surveillance responsibilities, as well as the integrity of the prices established" thereon, the letter then outlined four new conditions that it imposed upon ICE: "position limits or position accountability levels (including related hedge exemption provisions) as adopted by" U.S. regulated contract markets; quarterly reports of any member exceeding those levels and limits; publication of daily trading information comparable to that required of U.S. contract markets; daily reporting of "large trader positions" as provided by U.S. regulated markets.[109]

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[105] *See* Letter from Twenty-Two Senators to Walter Lukken, Acting Chairman, CFTC (May 23, 2008), *available at* http://cantwell.senate.gov/news/record.cfm?id=298325 (last visited June 21, 2008) (insisting that CFTC require ICE to demonstrate why it should not be subject to the same regulation as other U.S.-based exchanges and warning, "[a]bsent expeditious Commission action, Congress may need to step in to protect consumers and ensure that all markets trading U.S. delivered energy futures are transparent and free of fraud, manipulation, and excessive speculation"); Letter from Senator Jeff Bingaman to Walter Lukken, Acting Chairman, CFTC (May 27, 2008), *available at* http://energy.senate.gov/public/index.cfm?FuseAction=PressReleases.Detail&PressRelease_id=0fdd0eb4-4b1d-49f0-a3a2-f89fd0e4b1d3&Month=5&Year=2008&Party=0 (last visited June 21, 2008) (expressing concern that that "the Commission's assertions to date -- discounting the potential role of speculation in driving up oil prices -- have been based on a glaringly incomplete data set" and demanding an explanation of many CFTC activities); *Energery Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?: Hearing Before the House Subcomm. on Oversight & Investigations*, 110th Cong. (2007) (statement of Rep. Joe Barton, Member, House Subcomm. on Investigations) (informing Walter Lukken, Acting Chairman, CFTC, that Congressed had empowered FERC to provide additional regulation in some energy markets because they were displeased with the CFTC's efforts).

[106] *See supra* notes 45-49 and accompanying text; Press Release, Senator Cantwell, Senators Cantwell and Snowe Demand Intercontinental Exchange Reveal Names Behind Record Oil Prices (June 12, 2008), *available at* http://cantwell.senate.gov/news/record.cfm?id=299072 (last visited June 22, 2008) (demanding that Acting CFTC Chairman Lukken receive information directly from ICE pursuant to its no action letter).

[107] Amendment to No-Action Letter Issued to the International Petroleum Exchange of London (now ICE Futures Europe), CFTC No-Action Letter 2 (June 17, 2008), *available at* http://www.cftc.gov/stellent/groups/public/@lrlettergeneral/documents/letter/08-09.pdf (last visited June 20, 2008).

[108] *Id.*

ICE was given 120 days to come into compliance with the new CFTC conditions.[110] The CFTC acknowledged that the new ICE rules would have to be approved by the FSA.[111] The June 17 letter to ICE concludes by stating that only if ICE complies with the conditions outlined therein can ICE be assured that the CFTC will "not recommend that the Commission institute enforcement action against [ICE] or its members" based on ICE's failure to register as a U.S. regulated contract market.[112]

On June 17, 2008, the day that that letter to ICE was released, CFTC Acting Chairman Lukken is reported to have told the Senate oversight committee: "The CFTC will also require other foreign exchanges that seek such direct access to provide the CFTC with comparable large trader reports and to impose comparable position and accountability limits for any products linked with US regulated futures contracts[.]" [113]

Much of what the CFTC has done implements the data collection requirements required of FBOTs by S. 3130. Indeed, the CFTC's threat of enforcement authority against ICE in its June 17, 2008 letter, while limited for these purposes to failing to register as a U.S. regulated contract market, would seem to make it clear that that agency could enforce all civil and criminal penalties asserted throughout the CEA against ICE and its members if appropriate, thereby possibly even exceeding the grant of section 9 enforcement powers afforded the CFTC with regard to FBOTs in S. 3130.

As will be shown below, however, Congress would be well advised to use the full force of its powers to bring ICE and similar "foreign" exchanges with trading terminals in the U.S. under complete U.S. regulatory control.

The CFTC's New Regulatory Approach for FBOT U.S. Terminal Trading Falls Short of What Is Needed to Drive Excessive Speculation from U.S. Energy Futures Markets

With regard to the CFTC's June 17, 2008 actions towards ICE, there is much to be skeptical about. No sooner was the ink dry on the CFTC letter to ICE than the CFTC enforcement director, who is well into the seventh month of an investigation on this matter and has yet not collected much needed data, publicly proclaimed at a gathering of foreign traders in Stockholm, "we have no evidence that speculators in ICE WTI contracts are manipulating markets."[114] Substantial bipartisan concern was expressed to Acting Chairman Lukken, on the day the letter was sent to ICE calling for more information, that he and the agency were at least giving the appearance of pre-judging the outcome of the investigation by expressing doubts about its merits.[115] The skepticism about the bona fides of the investigation is understandable given the agency's stance up to May 20 that a comprehensive review of the evidence had already been completed and had demonstrated that the oil futures market was being driven exclusively by supply/demand fundamentals.

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[109] *Id.* at 3.

[110] *Id.*

[111] *Id.*

[112] *Id.*

[113] Nick Snow, *US CFTC Unveils New Foreign Market Data Pact*, OIL & GAS J., (June 18, 2008), *available at* http://www.mapsearch.com/news/display.html?id=332086 (last visited June 21, 2008).

[114] John Rega & Matthew Leising, *Regulator Says No Evidence Speculators Manipulating Oil Futures*, BLOOMBERG (June 18, 2008).

Second, there appears to be a lack of urgency in the CFTC's actions. The terms of the ICE no action letter granting U.S. terminal presence with UK regulation expressly provides that the CFTC may obtain trading data directly from ICE.[116] Yet, the June 17, 2008 letter affords ICE 120 days to provide trader data and then it only appears to call for prospective information, i.e. no data will be afforded of the skyrocketing escalation of this last year. The gasoline crisis today has reached emergency proportions for both American industry and the American public; 120 days is a virtual lifetime in this turbulent economic environment.[117]

It would therefore seem that legislation must be passed to assure rapid oversight of ICE and any other FBOT trading U.S. delivered energy futures products on U.S. terminals. The question then arises: should the U.S. continue to regulate FBOT trading of U.S. delivered energy products on U.S. terminals principally through foreign regulators while requiring more aggressive CFTC oversight of that process as is true of S. 3130? Or, should trading of U.S. delivered energy products on U.S. terminals be deemed a sufficient nexus to the U.S. to require direct U.S. supervision as is directly required by the 2008 PUMP Act?

The Lack of Emergency Authority to Intervene in Market Distortions. The most substantial risk in following the CFTC policy of leaving ICE and other similarly situated "foreign" exchanges under the principal supervision of foreign regulators at the same time those exchanges have U.S. terminals trading critically important U.S. delivered energy products is that the CFTC cannot exercise its broad emergency authority to intervene immediately when confronted with emergencies and dysfunctions on U.S. regulated contract markets. "[118]

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[115] Steve Hargreaves, *Congress Takes Aim at Oil Speculators*, CNN MONEY.COM, (June 17, 2008), *available at* http://money.cnn.com/2008/06/17/news/economy/oil_trading/index.htm?section=money_topstories (last visited June 21, 2008).

[116] Written Testimony of Professor Michael Greenberger, *Lessons from Enron: An Oversight Hearing on Gas Prices and Energy Trading: Hearing Before the United States Senate Policy Committee* (2006), *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1017&context=cong_test (last visited June 21, 2008) (explaining that ICE's no action letter provides that the CFTC can, "obtain directly from ICE on a regular basis trading data pertaining to the oil markets"); IPE, CFTC No-Action Letter, 1999 CFTC Ltr. LEXIS 152, 64 n.64 (Nov. 12, 1999) (stating that "IPE will provide directly to the Commission information necessary to evaluate the continued eligibility of IPE or its members for the relief, to enforce compliance with the terms and conditions of that relief, or to enable the Commission to carry out its duties under the CEA and Commission regulations.").

[117] Written Testimony of James C. May, President of the Air Transport Association, *CFTC Energy Markets Oil Futures Contracts Oversight: Before the Senate Committee on Agriculture, Nutrition and Forestry and the Senate Appropriations Subcommittee on Financial Services and General Government* (2008), *available at* http://www.airlines.org/government/testimony/ATA+Testimony++CFTC+Energy+Markets+Oil+Futures+Contracts+Oversight.htm (last visited June 21, 2008). Mr. May indicated that "this country's airlines expect to lose in the range of $10 billion this year – a loss equal to or greater than the worst year in this industry's history… High fuel prices are the sole reason." *Id.* He concluded,

> Congress has a choice: stay with the status quo or make the hard decisions. The status quo means continuing to blame high oil prices on the weak dollar and growing demand from China and India. Status quo means forming yet another commission or task force to study the problem and report back in six months. The airlines won't be around much longer if the status quo wins the day. As I said at the beginning of my remarks, if Congress does not act soon, this country will not have a viable airline industry. *Id.*

Described as the CEA's "most potent tool," section 8a (9) provides that "whenever [the CFTC] has *reason to believe* that an emergency exists," it may take such actions "including, but not limited to "the setting of temporary emergency margin levels on any futures contract [and] the fixing of limits that may apply to a market position."[119] An "emergency" is defined:

> "to mean, in addition to threatened or actual market manipulations and corners, any act the United states or a foreign government affecting a commodity or any other major market disturbance *which prevents the market from accurately reflecting the forces of supply demand for such commodity*."[120]

It should be born in mind that these emergency powers afford the CFTC the *immediate* right to alter on a real time basis margin requirements and speculation and position limits to deal with crises as they arise "*which prevent[] the market from accurately reflecting the forces of supply demand[.]*" While section 8(a) (9) affords direct judicial review of orders after they are issued in a federal court of appeals, it does not by its terms require emergency orders to be preceded by notice and an opportunity to be heard, thereby ensuring speedy restoration of normal market processes.[121]

When one reads this broad power afforded to the CFTC, one could reasonably ask why it has not been used on days such as Friday, June 6, 2008 when the WTI crude oil futures prices rose nearly $11 per barrel in a single day.[122] That is best explained by the fact that the only real time market data in the hands of the CFTC on that day was on NYMEX—the fully regulated U.S. exchange with speculation limits in place; perhaps if the CFTC had meaningful ICE data on that day, thereby seeing the entirety of the WTI crude oil market, it might have seen a need to intervene under its emergency authority to impose temporary position limits and margin requirements to cool down what was deemed to be breathtaking volatility.

Of course, even when it receives the ICE data within the next 120 days pursuant to its June 17, 2008 requirements, the CFTC will still not have the authority under the no action letter process to use its emergency intervention powers on ICE even though over 60% of ICE U.S. delivered WTI futures trading is done within our own country. Rather than exercising real time emergency authority, the CFTC will have to once again "negotiate" with the FSA to have that U.K. regulator intervene to deal with, *inter alia*, ICE WTI trade matching systems located in Chicago, Illinois.

Moreover, relying upon the FSA to intervene on a real time basis for a "major market disturbance" on a U.S. delivered energy futures contract traded on U.S. terminals is as problematic as a matter of policy as it is as a matter of logistics. Unlike the robust emergency authority given by Congress to the CFTC under section 8a (9), the FSA emergency powers have been implemented in a quite lackluster fashion. While its governing statute affords intervention power[123], FSA makes clear on its web site that the U.K. has translated any such authority when "major operational disruptions" are detected on ICE, to a "Tripartite Standing Committee" that would convene the "Cross Market Business Continuity Group" (CMBCG) to:

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[118] JOHNSON & HAZEN, *supra* note 51, at 1218.
[119] 7 U.S.C. § 12a(9) (2008) (emphasis added).
[120] *Id.* (emphasis added).
[121] JOHNSON & HAZEN, supra note 51, at 1221-22.
[122] *See* Simon Webb, *OPEC hike unlikely at emergency oil talks*, REUTERSUK, (June 20, 2008), *available at* http://uk.reuters.com/article/oilRpt/idUKL2058919720080620 (last visited June 21, 2008).

> "provide[] a forum for establishing senior-level practitioner views . . . . Its role is advisory: decisions will be for the relevant official or market authorities or for firms themselves either individually or collectively through the agency of the CMBCG. The CMBCG may also have a role in pooling information to help facilitate private sector decisions and workarounds to alleviate pressures on the system."[124]

This U.K. guidance for sharing "views" and for "pooling information" in an "advisory" capacity to "help facilitate private sector" decisions in London is what the U.S. industrial consumers of crude oil and the U.S. gas consuming public are left to fall back upon when WTI crude oil skyrockets to $150 per barrel by July 4, 2008, as is predicted by Morgan Stanley, one of the founders of ICE.[125] The CFTC's June 17 imposition of new conditions on ICE do not convert the U.K.'s lackluster emergency responses into the vigorous emergency responses called for by U.S. law.

Indeed, any effort by Congress to insist upon "comparability" on emergency powers is futile. As the *Financial Times* has so aptly commented on June 20, 2008, the U.K.'s futures regulator "operates a . . . system of 'credible deterrence' of wrongdoing by *engaging in a dialogue with market participants*. Since the FSA's creation in 1997, it has brought *no* civil or criminal cases in energy markets."[126] In stark contrast, as Acting Chairman Lukken recently proudly reported to Congress: "[s]ince December 2002 to the present time, the [CFTC] has filed a total of 39 enforcement actions charging a total of 64 defendants with violations involving the energy markets," having referred "35 criminal actions concerning energy market misconduct" to the Department of Justice.[127]

The contrast between FSA and CFTC enforcement activity in the energy futures markets under their control is quite remarkable, especially since ICE is responsible for nearly 50% of all crude oil futures contracts traded worldwide and since the CFTC has not had access to meaningful ICE data.[128]

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[123] § 313(A), Financial Services and Markets Act 2000).

[124] *Developments in financial sector crisis management*, FSA Homepage, *available at* http://www.fsa.gov.uk/Pages/About/Teams/Stability/crisis/index.shtml (last visited June 21, 2008).

[125] Tim Paradis, *Stocks decline in jobs data, surge in oil prices*, ASSOCIATED PRESS (June 6, 2008), available at http://ap.google.com/article/ALeqM5gHs5OM3gFG_DytQQZFbWfgPT08MAD914K0H80 (last visited June 21, 2008). Goldman Sachs, also one of the founders of ICE, has predicted that the price per barrel of crude oil will surpass $200 by October of this year. Neil King Jr. and Spencer Swartz, *U.S. News: Some See Oil at $150 This Year --- Range of Factors May Sustain Surge; $4.50-a-Gallon Gas*, WALL ST. J. (May 7, 2008) at A3; Greenberger, *supra* note 1, at 7.

[126] Jeremy Grant, *ICE restrictions cold comfort for FSA*, FINANCIAL TIMES (June 20, 2008) (emphasis added), *available at* http://www.ft.com/cms/s/0/2ba33a0e-3e35-11dd-b16d-0000779fd2ac.html (last visited June 21, 2008).

[127] Written testimony of Acting Chairman Walter Lukken, *Hearing Before the Senate Appropriations Subcommittee on Financial Services and General Government And The Senate Committee on Agriculture, Nutrition and Forestry* 4 (2008), *available at* http://www.cftc.gov/stellent/groups/public/@newsroom/documents/speechandtestimony/opalukken-41.pdf (last visited June 21, 2008).

The American gas consuming public's trust in the FSA might also be shaken by the U.K.'s response to the June 17, 2008 CFTC announcement of the imposition of new transparency requirements on ICE's use of U.S. terminals used as a critical part of ICE's control of over 30 % of the U.S. delivered WTI contract. Mr. Stuart Fraser, head of policy at the City of London Corporation, is reported in the *Financial Times* to have called the CFTC June 17 letter "American imperialism," and adding for measure "if a bunch of [S]enators want to get rude about the FSA, that's fine, but don't interfere in *our* market."[129]

Of course, the UK is wrong to think trading on U.S. terminals of the U.S. WTI contract is "their" market. ICE is U.S. owned, operated in Atlanta with trading terminals and engines in the U.S. and trading over 30% of U.S. delivered crude oil futures market in U.S. dollar denominated currency.

However, one could easily see how those officials in the U.K. might mistakenly view WTI trading on U.S. terminals as "their" market when the CFTC and ICE continue to refer to this self evidently "U.S." market as being conducted on a "foreign" exchange. If the CFTC were to flatly state the obvious, *i.e.*, ICE is wholly a U.S. concern, having brought the corpus of the old British International Petroleum Exchange, for all intents and purposes, to the U.S., the UK might grasp the reality of the situation, rather than the ICE perpetuated "London" myth.

Deferring to Foreign Regulators Undercuts the Self Regulatory and Surveillance Requirements of U.S. Law. Next to the inability to exercise the extraordinary emergency powers afforded the CFTC to oversee its markets by deferring to the foreign regulators to supervise U.S. delivered energy futures products on U.S. trading terminals, the most serious problem with the CFTC's June 17, 2008 deference to FSA is that agency's sacrifice of the substantial self regulation and surveillance provided by U.S. regulated contract markets to assist U.S. regulators in policing futures markets.

The "core principles" within the CEA that must be followed by an approved U.S. regulated contract market emphasize the importance having those markets serve as the first line of defense for the CFTC in detecting fraud, manipulation, excessive speculation, and other unlawful trading malpractices.[130] Without aggressive self-policing of the entirety of the regulated U.S. futures markets, the CFTC simply cannot do its job.

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[128] Intercontinental Exchange, Inc., Annual Report Form (10-K) at 63 (Dec. 31, 2007) *available at* http://www.secinfo.com/dsVsf.tU7.htm (last visited June 22, 2008) (showing that ICE's total crude oil futures market share is 47.8%).

[129] Jeremy Grant, *Storm over push for regulatory reform on positions at ICE*, FINANCIAL TIMES (June 20, 2008) (emphasis added), *available at* http://www.ft.com/cms/s/0/a00c6a00-3e62-11dd-b16d-0000779fd2ac.html (last visited June 21, 2008).

[130] 7 U.S.C. § 7(d)(2)-(6) (2008); (2) (compliance with rules); (3) (contracts not readily subject to manipulation); (4) (monitoring of trading); (5) (position limits); (6) (emergency authority); 7 U.S.C. § 7a(d)(2)-(3) (2008); (2) (compliance with rules); (3) (monitoring of trading).

The seriousness with which U.S. regulated markets take their statutorily mandated self-policing and surveillance role is evidenced by NYMEX's "standards and safeguards" concerning trade and market surveillance. For example, NYMEX makes clear:

> Market surveillance is required under CFTC regulations. Each day, the compliance staff compiles a profile of participants, identifying members and their customers holding reportable positions. In addition, daily surveillance is performed to ensure that Exchange prices reflect cash market price movements, that the futures market converges with the cash market at contract expiration, and *that there are no price distortions and no market manipulation*. . . .[131]

As to trade surveillance, NYMEX provides:

> Compliance department analysts are trained to spot instances of misconduct, including "front running" or trading ahead of a customer; wash or accommodation trading (transactions creating the appearance of trading activity, but which have no real economic effect); prohibited cross trading (trading directly or indirectly with a customer except under very limited circumstances, or matching two customer orders without offering them competitively); prearranged trading; and non-competitive trading.[132]

NYMEX reports that is has @ $6.5 million budget for oversight market surveillance with an enforcement staff of @ 40 personnel.

No detailed analysis of ICE's self-regulatory and surveillance system is required. Suffice it to say, that for all of ICE's worldwide markets which are accessible by the U.S. trading terminals, including the U.S. WTI contract, reports are that ICE employs no more than ten individuals on its surveillance staff, i.e., a staff that is one quarter the size of NYMEX. This staff monitors trading of a host of ICE contracts, including those contracts which control over 47% of the world crude oil futures.[133] Of course, for those energy futures trades ICE executes under the Enron Loophole (because those trades do not derive from the old-IPE), such as the critical Henry Hub U.S. delivered natural gas futures contract, ICE, as of now, has *no* self-regulation or surveillance system.

Moreover, leaving ICE's paltry surveillance resources to the side, the principal regulator to which the CFTC is deferring to oversee directly over 30% of U.S. delivered WTI contracts, the U.K.'s FSA, has only "two full time supervisors," monitoring all of the ICE contracts under their jurisdiction.[134] Again, this includes 47% of world's energy futures contracts.

In sum, even though the CFTC has ratcheted up ICE's regulatory obligations by adding large trader reporting and speculation limits to the WTI trading, it defers to the FSA for the remainder of the oversight of ICE. In effect, the CFTC has surrendered emergency authority to intervene when there are market dysfunctions to impose temporary margin requirements and position limits; and it has sacrificed its "eyes and ears" on these markets by depending upon ICE's meager self-policing and surveillance.

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[131] NYMEX, Enforcement of Exchange Rules, *available at* http://www.nymex.com/ss_main.aspx?pg=6 (last visited June 22, 2008) (emphasis added).

[132] *Id.*

[133] *See supra* note 127 and accompanying text.

[134] Grant, *supra* note 125.

In a time of economic distress for American industry and the American consumer caused by skyrocketing energy prices, this country cannot afford to outsource authority to the UK to oversee trading on 30% of our own U.S. delivered crude oil futures contracts, much of which is consummated on U.S. based trading terminals and all of which is trade matched in Chicago, Illinois.

Finally, it bears repeating that during last summer's subprime mortgage crisis, Northern Rock PLC, one of the U.K.'s largest banks, was required to borrow billions of dollars from the U.K.'s central bank.[135] After news of the bailout was released to the public, thousands of customers wary of losing their savings stood in long lines for several days outside of Northern Rock's branches to withdraw deposits.[136] With Northern Rock on the brink of collapse, the FSA provided over $100 billion in loans to the bank and in February 2008, the British government finally was required to nationalize it.[137] In March 2008, FSA published an internal report stating that its regulation of Northern Rock "was not carried out to a standard that is acceptable," and highlighted its own failure to provide adequate supervision, oversight, and resources.[138] In addition to FSA's self-criticism, in April 2008, the European Union opened a formal investigation into FSA's restructuring of Northern Rock.[139]

This episode, maybe more than any other, reveals that Congress cannot afford to outsource oversight of trading on U.S. terminals of the most important futures contract in determining the price of oil, gasoline, and heating oil. As demonstrated above,[140] Congress has the full authority to pass legislation placing those U.S. terminals under U.S. regulatory control.

Threats that the U.S. reassertion of regulatory control over trading within the U.S. will drive trading overseas are undercut by the reality of every major futures foreign exchange having set up shop in the U.S.; and by the well documented law described above that even a foreign trader in a foreign country who illegally disrupts U.S. markets is subject to the full force and effect of that law.

Finally, contrary to the assertion of the City of London Corporation, this is not a "British" market; it is a U.S. market principally being traded in the U.S. by a trading entity controlled by a U.S. corporation. The economic distress now being suffered by Americans over high energy products cannot be placed in the hands of foreign governments when those products are traded here and have such a huge impact on our economy.

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[135] *See Rock Expects £30bn Loan this Year*, BBC NEWS (Nov. 7, 2007), *available at* http://news.bbc.co.uk/1/hi/business/7073556.stm (last visited June 22, 2008).

[136] *See Crisis Deepens for Northern Rock*, REUTERS (Sep. 17, 2007), *available at* http://www.iht.com/articles/2007/09/17/asia/17northern.php (last visited June 22, 2008).

[137] *See* Stephen Castle, *EU to Investigate Northern Rock Nationalization in Britain*, INTERNATIONAL HERALD TRIBUNE (April 2, 2008), *available at* http://www.iht.com/articles/2008/04/02/business/rock.php (last visited May 29, 2008).

[138] *See British Regulator Admits Failings in Oversight of Northern Rock, Announces New Procedures*, ASSOCIATED PRESS (March 26), 2008, *available at* http://www1.wsvn.com/news/articles/world/MI81198/ (last visited June 22, 2008).

[139] *See* Castle, *supra* note 136.

[140] *See supra* notes 50-69 and accompanying text.

Mr. STUPAK. Thank you and thank you to each of you for your testimony.

Mr. Newsome, in your testimony you said that there is no evidence that increased speculation is impacting oil prices. You cite NYMEX research department analysis that, quote, "noncommercial speculative positions in oil futures are declining relative to commercial future holdings." From that you conclude that speculative interest is not causing prices to increase. But isn't it the case that your analysis excludes trading of the West Texas intermediate crude oil, futures oil on ICE futures in Europe, which adds additional 30 percent trading volume on top of NYMEX?

Dr. NEWSOME. That's true, Mr. Chairman, and my comments in the testimony reflect only the information that we see and that we collect on the New York Mercantile Exchange. Obviously the information at ICE and the over-the-counter markets is not a component of that.

Mr. STUPAK. So it's also the case that comparing commercial versus noncommercial open interest is largely a worthless exercise, isn't it?

Dr. NEWSOME. No, I wouldn't say it's worthless. Certainly we are in agreement that it can be made better. I think the index funds, the activity, the swaps dealers is a relatively new scenario. Certainly as soon as we became familiar with that we immediately supported the CFTC, further delineating that information so that we could see exactly what the customers were doing behind the swaps dealers.

Mr. STUPAK. So speculative interest is, when you look at swaps and when you look at the speculative positions in the commodity index, investments certainly are causing increase in oil prices, are they not?

Dr. NEWSOME. No, sir, I would not agree with that. Certainly there are more speculators in the market. But if you look at how the market operates, and there are two things I would bring up, one is that because of the very nature that they are speculators, they cannot make or take delivery of the contract and they will always trade out of that contract prior to expiration. So they're not even in the market at expiration when the key pricing figure is developed.

Mr. STUPAK. And because they never take delivery and they roll that contract over, every time they roll it over don't they set a new floor price?

Dr. NEWSOME. But by the nature of a roll, a roll by definition is selling the front month and then turn around and buying a back month. So my point is because they are speculators, if you believe that they have the ability to drive the price higher when they're buying, why does it not drive it lower when they're selling, which they have to sell every month?

Mr. STUPAK. Because every time you roll, and every time you buy every month or when they sell, they come in at a higher price than what they sold at, do they not? Especially with all the extra money? If you go back to the chart that Mr. Lukken had up, where he said it was basically flat, you saw the price continue to increase. So every time you roll one of those over, there is a new floor that is being created. You add that large investment of money called the pension funds and others who are bringing money in which is driving up the price.

Dr. NEWSOME. Again, you know by the very nature of the roll they have to sell. And there is no question and no one is arguing that prices are not going higher. It's just the fundamental reason why prices are going higher, and the fact that the speculators have to sell each month before expiration in no way is driving the market lower. And therefore it's hard for me to believe that on the flip that they are driving the market higher.

Mr. STUPAK. Let me ask you this. How do you define excessive speculation?

Dr. NEWSOME. Well, I think we take steps to make sure that we do not have excessive speculation at NYMEX. One of the comments that has been thrown around today is that there are no position limits. We've absolutely hard position limits on all of our contracts with the New York Mercantile Exchange. Those are hard limits.

Mr. STUPAK. What are those hard limits?

Dr. NEWSOME. 3,000 contracts for the last 3 trading days.

Mr. STUPAK. So what is the limit on ICE?

Dr. NEWSOME. There are no limits.

Mr. STUPAK. There are none?

Dr. NEWSOME. Yes, sir.

Mr. STUPAK. All right. So, and Mr. Lukken said you can have a limit with you and you can go and have a limit with London futures so you don't take the aggregate, you just take individuals, right?

Dr. NEWSOME. And we have experienced that in our markets, speculators who bumped up against position limits who we required to stop trading.

Mr. STUPAK. Then they go to ICE like Amaranth did?

Dr. NEWSOME. Yes, exactly.

Mr. STUPAK. Should swap dealers trading standardized contracts in order to counter markets for energy which can affect prices in the futures market directly or indirectly be subject to disclosure requirements and oversight by the CFTC?

Dr. NEWSOME. Certainly the price discovery mechanism is one that I think is near and dear to the marketplace and to the extent that an OTC contract becomes large enough and linked to a contract and therefore has an influence on price discovery, without question it should be regulated.

Mr. STUPAK. Would NYMEX support a requirement that such trades be cleared through an exchange as a way to provide transparency and ensure accountability?

Dr. NEWSOME. I mean we do have a very big component of our business that is clearing over-the-counter trades. The way we currently do that, we make that fully transparent to the CFTC and those trades become aggregated as part of our position limits as well.

Mr. STUPAK. OK, you're regulated by CFTC?

Dr. NEWSOME. Yes, sir.

Mr. STUPAK. We've been here now for about 6 hours, we're probably going to be here for another hour. Why wouldn't we just apply all the trades that are going to ICE the same regulatory scheme that NYMEX has? Would not this problem go away with excessive speculation that we're alleging? Wouldn't that be a way to do it?

Dr. NEWSOME. And we have been advocating that for the last 2 years.

Mr. STUPAK. Sir Robert Reid, would you like to comment on that? Why wouldn't you just, since you're a foreign exchange by name only—you have your offices in Atlanta, Chicago, the trades are here, it's on West Texas Intermediate crude. Other than name, you're a U.S. company. So why wouldn't you just be subject to the same regulations as NYMEX?

Mr. REID. We need to correct a few things first. First of all, we were founded in 1981 and we operate under the regulation of the Financial Services Authority.

Mr. STUPAK. In London.

Mr. REID. And many comments have been made about the laxity of that. All I can say is if that is lax regulation, I never want to see hard regulation.

The second thing is we have been to the CFTC. I have personally been in Washington across, around a panel like this, being asked questions. All our information is available to the CFTC if they want it.

Now as far as limits are concerned, as I said in my introductory remarks, this is all about supervision and knowing your market. We know the positions of each of the people on our markets. And if they look unusual or if they look as if they're growing and we don't understand it, then we call them in and we ask the questions. We can ask them to reduce or we can ask them to close them down. This is what I would call effective management, effective supervision.

Mr. STUPAK. But in all honesty, the FSA, you don't require position limits, right? NYMEX has hard limits. You don't require position limits?

Mr.REID. We set our own limits.

Mr. STUPAK. You set your own.

Mr. REID. Yes. We look at what people have done and if we feel a small player has got beyond and may not be up to the sort of limits that NYMEX is talking about, we do something about it.

Mr. STUPAK. On the Amaranth case then when NYMEX said to Amaranth, you're getting too big, you can't be here, you're holding too much of the futures, they went to yours and to ICE and actually got bigger, and then they went bankrupt to the tune of about eight point something billion dollars. So where was the accountability? Where were the position limits there?

Mr. REID. I have no difficulty. If limits are wanted, limits can be provided. As I said to you in my opening remarks, limits must not be used as a crutch to avoid you doing the effective supervision of the market. You can't fall asleep under the governance of limits. You run the market as an effective supervisor.

Now if I can just say a little bit more.

Mr. STUPAK. Just a minute, my time is up.

Mr. REID. It's quite ample, your description of ICE. ICE acquired the Petroleum Exchange. And they acquired it simply because the Petroleum Exchange would not have continued to exist if it didn't have an electronic solution. ICE provided that electronic solution, and that's what made the Petroleum Exchange as successful as it is today. And that is the reason that it has 24 percent of the WTI market because NYMEX did not have an electronic system at the time and we were able to attract people because of the electronic nature of our system. I don't see why we should be criticized and penalized because in fact we're ahead of the electronic revolution.

Mr. STUPAK. No one is saying to penalize you or say you shouldn't play by the same rules. Didn't ICE buy NYBOT, New York Board of Trade?

Mr. REID. Yes.

Mr. STUPAK. So there is no U.S. company of BOT. So aren't you really a U.S. company doing business in the United States with most of your research work done?

Mr. REID. Well, our board for our exchange in London got independent directors that are directly responsible to the FSA. It is not, as it were, as people describe it as a dark pawn. In fact it's a very open, clear pawn.

Mr. STUPAK. Maybe your board is not, but the contracts you're trading certainly affect the U.S. markets, U.S. prices, U.S. economy, therefore why should you not be subject to the CFTC regulation like NYMEX?

Mr. REID. The CFTC has as much information as they want. The exchange of information in discussion with the CFTC is expensive. There's no question that they have anything we want. I made that clear when I came to Washington in 2006.

Mr. STUPAK. And my time has expired. Mr. Barton for questions, please.

Mr. BARTON. Thank you, Mr. Chairman. I'm not used to being in the center. I'm used to being down there on the end. But if I'm going to be in the center, I want to move one more chair to the right. I want to start out.

Mr. STUPAK. I'll put you on ICE.

Mr. BARTON. I want to start out by complimenting Sir Robert for testifying. In the 22 years that I have been on this subcommittee and the full committee I don't believe we've had many foreign-born nationals testify at all. Most of them use that as a reason not to testify. So I want to compliment you for being here, and I can also tell you in the 22 years in the Oversight Subcommittee where we take testimony under oath, you're the first person who ever refused to raise their right hand by saying you didn't have one.

Mr. REID. That is because I was next to Mr. Greenberger.

Mr. BARTON. You're doubly complimented. Now having said that, I want to start with Professor Greenberger. Is the ICE exchange that is physically based in Atlanta but is owned by the London agency, the London firm, is that a U.S. company or a British-based company? And who regulates it?

Mr. GREENBERGER. Mr. Barton, it's just the reverse of that. The Atlanta company owns the British office that Sir Robert comes under.

Mr. BARTON. I was only 180 degrees off.

Mr. GREENBERGER. There is a lot of confusion here, and I think it should be straightened out. So it's run and headquartered in Atlanta, Georgia. It was founded by Morgan, Goldman and British Petroleum. Now it has gone public. They still own stock in it, but it has gone public. The trading engine was brought, the mechanisms were brought, as the CFTC letter just the other day made clear, brought from London into the United States. In January 2006, I'm sure much to Dr. Newsome's surprise, they suddenly announced they are going to start selling U.S. West Texas delivered product.

Mr. BARTON. Before you go further, the company, the exchange in Atlanta, who has regulatory authority, not information-receiving authority, but pure regulatory authority, is it the CFTC or is it the British equivalent of the CFTC?

Mr. GREENBERGER. The CFTC allowed the British equivalent to have authority over U.S. trading terminals trading our contracts.

Mr. BARTON. So in absolute bottom line, the exchange that is located in Atlanta selling West Texas, or trading, posting West Texas Intermediate, the CFTC does not have the same regulatory authority as they do over the NYMEX?

Mr. GREENBERGER. They don't. And I might just add, Mr. Barton, that they could if they wanted to because I drafted the template. They could terminate that status, and they threatened to terminate that status tomorrow, and this would be a U.S.-regulated exchange.

Mr. BARTON. My question to Sir Robert, if the Congress directed or if the CFTC so chose under their existing charter to extend direct regulatory authority to the ICE exchange under the same terms and conditions as they currently do to the NYMEX, would your position or your company's position be to accept it or to fight it?

Mr. REID. As far as I'm concerned, when we discussed this with the CFTC in 2006 and the FSA were present, it was agreed that the regulatory system and regulatory information that was required by the CFTC would be provided for by ICE——

Mr. BARTON. That is all well and good, but that is not an answer to my question.

Mr. REID. As far as we're concerned, as it stands now, the FSA is our regulator. We operate in the City of London.

Mr. BARTON. I understand that. But you're not answering my question.

Mr. REID. What was your question then?

Mr. BARTON. You're pretty good at this. I think you have testified before some parliamentary——

Mr. REID. If you don't ask some questions, you won't get any answers.

Mr. BARTON. My question is you're not regulated, ICE exchange is not regulated under U.S. statutes like NYMEX is. If we so chose by act of Congress or if the CFTC thinks they have the authority, like Professor Greenberger says, and wants to extend it by regulation, by administrative act, would ICE accept it or fight it? It's pretty straightforward.

Mr. REID. It's not a straightforward question because it's a matter of international politics.

Mr. BARTON. I'm not asking about international politics——

Mr. REID. This is a matter in which I will need to take advice.

Mr. BARTON. You're going to fight it. I'm going to assume the default position, if it is not yes, is no.

Mr. REID. No. The answer is not a yes or no. The answer is the decision will be taken when the question is asked.

Mr. BARTON. It's an important question because we in the United States Congress and those agencies which we control by statute can enforce any law that we put on the books. If a foreign company, agency, individual, chooses to voluntarily cooperate with those rules and regulations, well and good. But if you take the position that you're not subject to the regulations and choose not to voluntarily comply, it's a very complex question how we enforce that. And if the end result is to set up, and each of you gentlemen with NYMEX and ICE, you're in business to make money. You're in business to gain market share. You're in business, you want to provide all these great market transparency and price discovery and all that, but bottom line if nobody buys your contract, you go out of business and nobody takes your contract. So, if we do something that raises margins and has hard, hard rules against exemptions and all these things that increase transparency and try to dampen the pure so-called excessive speculation, whatever that is, a person who would tend to work on the NYMEX is going to say, aha, there's another market here, we will just go over there. Now it has already been shown, as our subcommittee chairman has pointed out, in the natural gas market that happened. And the response was, we set our own regulation. We set our own limits based on a gentlemanly conversation between what we think is good for the client. That is not the same as a hard limit.

Now, I may look dumb, and sometimes I actually say and do dumb things. But I understand competitive markets, and I understand that the reason ICE exists is to make money for whoever runs it and secondarily to provide competition for who dominated the market before, which is NYMEX.

Now we wouldn't be having this conversation if oil was at $15 a barrel. You know, we're having it because when we go home, people come up, if they see me gassing my car up, they say you're Congressman Barton, which is not really, because it says U.S. House 6 and a Barton bumper sticker on my car, what are you going to do about high gasoline prices? And one of the things that we can do is do something to dampen the speculative price impact in the market. So it's very important whether your exchange—which I'm all for having two exchanges so that we give people a competitive option, but we've got to get you to play by the same rules. If you don't play by the same rules, whichever exchange has the least stringent rules is going to get all the business. That is just pure common sense.

So it's important, my question. I will give you one more chance. You fight it or you welcome it? Or not welcome it, but accept it?

Mr. REID. This is my last chance, is it?

Mr. BARTON. Almost. I have one more question. Probably. I'm over 2 minutes.

Mr. REID. Well, obviously in a situation of which if you want to do something regarding margins or you want to do something about the category of people who trade on these exchanges and change the structure of the Exchange, then obviously the regulators on both sides of the Atlantic are going to have to discuss how this is going to be interpreted. I don't think you would expect me to concede now that anything that you may decide to do, for example, on margins that we would necessarily agree with, right?

Mr. BARTON. No, I don't expect you to agree.

Mr. REID. So what I'm saying is——

Mr. BARTON. It would be nice if you did, but I don't expect you to.

Mr. REID. Let's hear what you want to do and then we will see from our point of view in the U.K. What we think would be a sensible thing to do. After all this is really about a global corporation. The relationship between the CFTC and the FSA is extremely close.

Mr. BARTON. And I think it's very fortunate that the exchange you're talking about——

Mr. REID. I'm 100 percent behind——

Mr. BARTON [continuing]. Is based in London as opposed to in Moscow. I think that is a good thing that we have a London-based situation as opposed——

Mr. REID. We're not so happy with Moscow at the moment.

Mr. BARTON. But you have a history in your country of markets and regulation and the British system of trading has been around for 4 or 500 years.

My last question, Mr. Chairman, is we've heard from all the other panelists what they think the speculative price is. We've heard some people say half the current price, which would be close to $70. What do you three gentlemen think if we did some of the things that we're talking about doing, if we took Dr. Masters' proposal, we increased margin, we set strong position limits, we limited the ability to get exemptions, we had more price transparency, how much would that impact the price? In other words, what do you think the speculative bubble is? Dr. Newsome?

Dr. NEWSOME. I think it would have very little impact.

Mr. BARTON. If you don't change the underlying market fundamentals, it's not going to do any good?

Mr. NEWSOME. Correct.

Mr. BARTON. Sir Robert?

Mr. REID. Can I just take a few minutes on this?

Mr. BARTON. It's up to the chairman.

Mr. REID. I was in Lagos in 1974 at the time of the first OPEC breakthrough, and they went to auction. They went to auction, and the oil price was down about $12. They went to auction, and the highest price bid was $42. People couldn't believe that. They multiplied it by almost 4 times. The oil was never lifted, but that is what it was. Six years later, coming on through 1974 on to 1980 when Khomeini actually took over power in Iran, that was a different thing. What happened there was he subtracted 3 million barrels a day out of the supply side. That set the whole world in a spin. Now if you remember here, you actually rationed your airplanes as to how they could fly. In fact you have a situation in which airplanes were tankering oil out of the Caribbean and moving it back into U.S. so as you could complete your domestic flights. I believe what you're seeing now is a genuine concern that the oil is not going to be forthcoming irrespective of the price.

If you take Nigeria, which I know well, if you take Nigeria, you're looking at a situation in the delta and the swamps where basically they cut out 230,000 barrels a day 5 days ago, they cut out another 200,000 barrels a day yesterday. The whole situation is very difficult. I think the market senses that this is a very, very uncertain period at this time, and I think that is where your speculation is coming from. That will change in time.

Mr. BARTON. Thank you.

Mr. GREENBERGER. I agree with what was said in the first panel this morning and I agree with that because I was a regulator in these markets and I know what happens when there is no police on the beat. It's just not a matter of throwing money at the thing, throwing billions and billions of dollars, which is the, quote, excessive speculation. If you don't have regulators looking at these markets with care, people engage in prearranged trades, running ahead. If you go to Mr. Newsome's website he has his own market surveillance committee and they list all the things they look for in their markets. And these markets are not only free of police for purposes of throwing money excessively, but I'm very confident that if a thorough investigation were done we would find the kind of malpractices.

And the final point I would say about this, if we keep pussy footing about this, we've got an investigation. It will come in September 15. We'll have an interagency task force. We will negotiate with the United Kingdom. We don't think there is speculation even before we ended the investigation. That is a signal to these traders. And these traders are low down, they're the wild, wild west, which I'm sure being from Texas you would understand. And when they hear that the CFTC doesn't think there's speculation, they're breathing a sigh of relief. The way these guys will get hit is with a two-by-four.

And I might add, a guy who used the two-by-four was Sam Graves of Missouri in December of 2005. He walked to the floor of the House of Representatives and added on the floor a floor amendment to the CEA Reauthorization Act. The price of natural gas was $14 per million BTU. It was at an all-time record high. And he said I want transparency and the House adopted that legislation in natural gas. It never ultimately passed, but within 6 weeks the price of natural gas dropped to $9. If you threaten serious, tough business, you will drive this price down because right now, these traders are acting in the dark. And it's not just throwing money at problems. There are the classic manipulations that led the farmer to get the Commodity Exchange Act passed to begin with. The farmers, as Chairman Dingell said, were getting hosed by the fast talking guys in Chicago. I have a quote in my testimony from 1892 of a wheat farmer in the Farm Belt saying I look out at my field and I don't own it. The guys in Chicago own it because they determine the price I sell my wheat at.

Mr. BARTON. Thank you. Thank you, Mr. Chairman, for your courtesy.

Mr. STUPAK. Mr. Dingell for questions.

Mr. DINGELL. Thank you, Mr. Chairman. Professor Greenberger, what would be the price if we were to get transparency and what would be the price if we were to get rid of all this speculation in the marketplace with regard to a barrel of crude?

Mr. GREENBERGER. I'm in agreement with the experts who were in the first panel that it would go down between—somewhere between 25 and 50 percent.

Mr. DINGELL. How much?

Mr. GREENBERGER. 25 and 50 percent.

Mr. DINGELL. Now you said something in your testimony earlier. You said that the CFTC could end excess speculation, and they could do it without new legislation. What would be required for them to bring this about?

Mr. GREENBERGER. If Mr. Lukken would agree, as he has threatened to do in his most recent letter to the FSA, to terminate this phony foreign board of trade for a U.S. company and require—and I would require it within 30 days—that the London board, that the Intercontinental Exchange register as a designated contract market, that would drive the speculators because then they would be under speculation limits and Mr. Lukken could oversee the margins. And in fact he could use his emergency authority. And when the oil price spikes $11 in one day, he can go to ICE, he can go to NYMEX, takes names, kick ankle, and drive those prices down. Right now, a lot of traders, from Goldman Sachs and Morgan Stanley on down, may very well believe that nobody is watching them. My experience is once they know that someone is looking over their shoulder, the funny business stops.

Mr. DINGELL. Appears to me maybe they're right. I don't think anybody is watching them.

Mr. GREENBERGER. I worry that that is the case. And by the way, the swaps dealer problem, that was not a problem before the CFMA was passed. Let me be clear about that. There were swaps dealers out there, but they were operating in what they called legal uncertainty because the swaps dealers were trading futures contracts illegally off exchange. The CFMA made all of that legal. And if we just said, as Chairman Stupak has said, Congressman Van Hollen, DeRosa, many Members in the Senate, all energy futures must be traded on a regulated contract market like Mr. Newsome's. Then all of this stuff, the index funds, everything, would have to be in a transparent market. By the way, I would add——

Mr. DINGELL. How do we make them be transparent?

Mr. GREENBERGER. By bringing all—by doing what Chairman Stupak has recommended in his bill, energy futures must be traded on a regulated exchange. No Goldman Sachs index funds, no foreign board of trades. Everything would have to go through a transparent exchange, overseen by the CFTC, not just for position limits and spec limits, but for wash trades, prearranged trades, emergency authority could be used, they would self-police themselves. On December 19, 2000, that was the way these markets operated. Everybody had to be in an exchange. We freed that. We freed that. Now maybe people didn't understand what they were doing at the time, but we now know it.

Now when we hear that we, quote, closed the Enron loophole, as Mr. Lukken explained, he now has to go contract by contract to prove that a contract should be regulated. The old system was every contract was regulated, not having to prove it contract by contract. And then Mr. Lukken informed Congress after they passed the Enron loophole, by the way this doesn't apply to crude oil, because crude oil is being traded in a foreign board of trade. So no petroleum products are covered by the, quote, end the Enron loophole.

Chairman Stupak has a very reasonable proposal that he has put forward that just takes us to the status quo of where we were on December 19, 2000. And by the way, Chairman Greenspan, Secretary Summers, Chairman Levitt of the SEC, all told Congress, don't deregulate nonfinancial futures contracts. They're too easily manipulated. It wasn't unexpected that this was going to happen. They predicted it.

Mr. DINGELL. Mr. Professor, how do you define excessive speculation?

Mr. GREENBERGER. Excessive speculation to my mind is that speculation which exceeds speculation limits properly set and properly enforced. And I don't want to belabor this point, with all respect for Dr. Newsome, and I have a great deal of respect for him, I don't think the spec limits on NYMEX are adequate.

Mr. DINGELL. Where 71 percent of the oil that is moved is moved through contracts but not through pipelines, that would be excessive, would it not?

Mr. GREENBERGER. Absolutely. And you see the figures, I forget what the first figure was, 2000?

Mr. STUPAK. Number 2.

Mr. GREENBERGER. Look at what the figures were. It was 37 percent speculation. The rest, 63 percent, commercial. Once these markets were deregulated it flipped to 71 percent, 29.

Mr. DINGELL. Can you identify the key loopholes in the Commodity Exchange Act which you think need to be closed?

Mr. GREENBERGER. Yes. The Enron loophole needs to be completely closed. The farm bill was a good start. But it does not completely close. It doesn't even apply to petroleum products. Foreign boards of trade who come into the United States with U.S. terminals selling U.S. delivered products should register with the CFTC. We heard something about you can't regulate foreign board of trades. I deal with that exclusively and substantially in my testimony. You most certainly can. And Mr. Lukken threatened the ICE exchange if they don't comply with his conditions, he is going to make them register. They should register.

The final thing is the swaps dealer loophole. The swaps loophole, that is energy contracts traded off exchange. If you put—ended the Enron loophole, the Goldman Sachs, Morgan Stanley would have to Mr. Newsome's shop and have their index funds or become an exchange themselves. We freed that. We are the enemy.

Mr. DINGELL. Professor, my time is running out. I have to get to another question. If you please, Mr. Newsome, why—and Sir Robert—please inform us why the two of you should be treated differently under the laws of different countries? Why should you not be treated exactly alike for your actions which are in the United States and which affect U.S. Markets?

Dr. NEWSOME. Mr. Dingell, when, under—ICE operating under the no action letters listing their own contracts, giving access to U.S. customers, we were fine under that scenario and the fact that we didn't have exacting regulatory regimes. However, when they started listing U.S. delivered contracts, the WTI in particular, then at that point we said that is not what the no action letters were intended to do, and we believe there should be the same regulatory regime.

Mr. DINGELL. Why shouldn't you be treated exactly the same?

Dr. NEWSOME. We think you should be if you're trading the same product.

Mr. DINGELL. Sir Robert, why shouldn't you be treated exactly the same?

Mr. REID. What we have said is we will do whatever the CFTC wants you to do.

Mr. DINGELL. Would you do that?

Mr. REID. We, in fact, agreed to position limits. We have no difficulty with that.

Mr. DINGELL. I want to make sure I heard you straight. You said you would do whatever the CFTC says——

Mr. REID. Yes. They've asked us for more information. We've given them more information. They've asked us to do the position limits, we have done the position limits.

What I find hard to see is what more we need to do. I'm amazed at this level of suspicion created by Professor Greenberger that thinks we operate a casino, which we don't.

Mr. DINGELL. This is a fine answer. But it is not to the question. Why should you be treated any differently than NYMEX? And on top of that, the next question was, if CFTC told you to do something would you do it?

Mr. REID. Yes. Why am I treated differently? I am treated differently. I'm treated twice. I'm treated by FSA and I'm treated by the CFTC. I get it two times. He only gets it once.

Mr. DINGELL. Professor Greenberger, why should they be treated differently?

Mr. GREENBERGER. They shouldn't be treated differently. It's essentially a United States entity, but even if it wasn't, if they have U.S. trading terminals trading U.S.-delivered product and they're in the United States they're subject to our jurisdiction. And by the way, Mr. Newsome is a very, very bright, skillful executive. He has articulated in his testimony well, If you're going to let this ruse go on, I'm going to London, I'm opening a London exchange, I'm going to get certified by the FSA. Then I'm going to get a no action letter to put my London terminals into the United States, and I will be regulated by the FSA instead of the CFTC. We've already let Dubai in on those terms.

Mr. DINGELL. Out of curiosity. What would be the attitude of the American people if we were to find out that something was set up in Dubai which was going to do the same thing, or what would be the attitude of our people if something was to be set up in Moscow or in Jeddah or in Riyadh?

Mr. GREENBERGER. Chairman Dingell, Dubai has already gotten permission to bring their terminals in the United States and to sell West Texas Intermediate to be regulated by the Dubai Financial Services Authority. That is the law under Chairman Lukken right now.

Mr. DINGELL. So they have already gotten permission.

Mr. GREENBERGER. Yes. They haven't started trading but they have permission to trade.

Mr. DINGELL. I had heard this, and that is why I asked the question.

Mr. GREENBERGER. So you will have to go back, such as Mr. Barton, when you're stopped at gas stations and when they say to you, hey, we have to do something about this, you can say well, I have every confidence, Chairman Lukken has assured me, that the Dubai Financial Services Authority has comparable regulation to us. That is laughable. You're laughing. It is laughable. But that is where we are right now.

Mr. DINGELL. Occasionally I laugh when I hurt.

Mr. Chairman, I have used more time than I'm entitled to. Thank you for your courtesy.

Mr. STUPAK. Thank you, Mr. Chairman. Mr. Burgess for questions please.

Mr. BURGESS. Thank you, Mr. Chairman. Dr. Newsome, if I could ask you, just following up the chairman's line of questioning, does the CFTC have any authority over Dubai if they see bad things happening on their selling look-alike West Texas Intermediate contracts?

Dr. NEWSOME. The CFTC has a much larger hook into the activities in Dubai than they currently do with ICE, primarily because NYMEX is one of the founding members of the Dubai Mercantile Exchange, the Oman contract is cleared by NYMEX in New York, and there is a clearing order with lots of regulatory bells and whistles tied to that.

At the very beginning, in Dubai, we announced that if we ever traded the WTI contract, which we do have the no action letter to do so, that day one it would include full position limits, the full large trader reports that we have recommended that the ICE should submit to the CFTC as well.

Mr. BURGESS. Very well. Now, too, Chairman Dingell was asking the question about transparency and how does transparency affect prices. He asked it to Professor Greenberger. I just wondered if you wanted to expound on that as well.

Dr. NEWSOME. We are in full support of open transparency and competitive markets. So while we may have some disagreement on what is driving the price, there is no disagreement from us that these markets should be made completely transparent.

Mr. BURGESS. Mr. Greenberger, you heard me questioning Chairman Lukken a few moments ago. Now, he made the statement to me that the final language in the Commodities Future Modernization Act was the same as passed in this committee, as passed on the House floor, as appeared in the appropriations bill, December 15 or 19, whatever that day was, in 2000. That was before I was born, so I don't know. So you tell me, is the language the same?

Mr. GREENBERGER. It's the same, but it's misleading to say that for this reason. The Senate bill did not have the Enron loophole as passed in it. The Senate bill had a much more controlling deregulation of those markets. Chairman Lugar did that. And some Members in the House wanted to substitute the Senate bill for the House bill and they couldn't do it. But here is what happened. On December 15th, out of the clear blue sky, maybe the 14th it starts, Congress comes back in a lame-duck session to pass an 11,000-page omnibus appropriation bill. The Senate has a voice vote. I have gone back to the Congressional Record. The bill is not laid out in the Congressional Record. True, it was read, but I'm very confident the Senate did not understand that the Senate bill did not include the much more restrictive version than the House bill. And why is that important? Because if the Senate bill legislation had passed, we probably would still have Enron today. They would have been saved from themselves. Moreover, people have said Secretary Summers supported whatever happened on December 15th. I have gone to the Congressional Record. Secretary Summers' letter appears not on December 15th, but on January 2nd, 2001, as something that was never read to the Senate on December 15th.

Mr. BURGESS. Well, if I could, and I will enter this into the record, I have the page from the Congressional Record, Senate 11897, December 15, 2000, Exhibit 1, December 15, 2000, Honorable Tom Harkin, Ranking Member, Committee on Agriculture, Nutrition, Forestry, U.S. Senate, Washington, D.C.

"Dear Senator Harkin, the members of the President's Working Group on Financial Markets strongly support the Commodities Futures Modernization Act. This important legislation will allow the United States to maintains its competitive position in the over-the-counter derivative markets by providing legal certainty and promoting innovation, transparency and efficiency in our financial markets while maintaining appropriate protections for transactions in nonfinancial commodities and for small investors. Sincerely, Lawrence H. Summers, Secretary, Department of the Treasury; Arthur Levitt, Chairman, SEC; Alan Greenspan, Chairman, Board of Governors of the Federal Reserve; William J. Rainer, Chairman, Commodity Futures Trading Commission." Again dated December 15, 2000. I will submit that to the chairman for the record.

[The information appears at the conclusion of the hearing.]

Mr. BURGESS. Now I will just say that was before my time and I don't know really all that was involved in that, but I do think we don't do ourselves any service, we don't further the cause when we misquote and misrepresent things. I think we heard from Chairman Lukken today that he has all the tools he needs right now to send the message to the excessive speculation that he could control it and it could stop. I for one don't understand frankly why he is not doing that. I hope he takes it to heart what he learned on the committee today and perhaps tomorrow will dawn a new day and he will exercise that authority. But I don't see that it furthers the cause in any way to continue to misrepresent things.

This language was passed in this committee, was passed on the floor of the House, was passed in the omnibus bill. December 15, 2000, the letter was read into the Congressional Record. I think it's time to move on from that, repeal it by all means, but at the same time to indicate that there was something else going on I think does a disservice.

Mr. GREENBERGER. Mr. Burgess, if I could have a point of privilege. The President's Working Group on Financial Markets thought that the Senate's version of the Enron loophole was in that bill when they wrote the letter, not the House version. A fast trick was pulled on the President's Working Group and on the Senate. The letter that endorses what happened is in the January 2nd, 2001 Congressional Record. I don't think there is a Senator who knew that the Enron loophole in the House version was on the Senate bill. And I might add, Mr. Burgess, that was considered to be extremely controversial, that Enron was going to be allowed to use its own exchange, which ultimately led, by enforcement actions, to the rising of electricity prices on the West Coast by 300 percent.

Mr. BURGESS. Let me interrupt you there. And I'm not here to debate the merits of that legislative language. All I would submit is that that language was passed by the House, roll call vote 540, 19 October 2000, 7:02 p.m., Commodities Futures Modernization Act. Many people on this committee on both sides of the dais voted aye in response to that bill. In fact, the total vote was 377 to 4, with 51 nonvoting.

Mr. GREENBERGER. And I would submit the Senate did not understand that the House version instead of the Senate version was put on the Senate bill. It was never explained to the Senate. That was duplicitous.

Mr. BURGESS. Sometimes you do have to speak slowly and clearly to the Senate in simple, declaratory sentences. But nevertheless it was passed by this House. I will yield back the balance of my time, Mr. Chairman.

Mr. STUPAK. Thank you, Mr. Burgess. Mr. Melancon for questions, please.

Mr. MELANCON. Thank you, Mr. Chairman. I appreciate it. I would like to ask Dr. Newsome, and just for the record he and I have been friends for some 20 years, back when he was just one of those lowly staffers over on the other side in the Senate, that august body we've been talking about for the last few minutes. But Dr. Newsome, I noticed you sitting here today making notes and such. But I would like you, if you would, just give me some of your thoughts and comments of what was said, what you feel was right, what you feel was wrong. I will allow you to go ahead and speak if you would.

Dr. NEWSOME. Thank you, Congressman, for that opportunity. I think maybe one thing, when we started this hearing, we all had to stand up and take the oath that we were going to tell the truth and the whole truth, and that is what we did. So, a couple of things maybe I'd just go back and say that at least from our viewpoint are not completely accurate or may be at the very least misunderstood and one—and with all due respect to the chairman, the chart that has been showed all hearing long about speculators, the two pie charts, I think both of those are wrong. I think the one that shows the speculative activity at roughly 37 percent did not include some speculative activity that is trading through the swaps dealers, so that 2000 number was probably a little bit low. But on the flip side, assuming that all of the swaps dealer activity is speculative activity is equally as wrong, because at least from our experience in NYMEX a substantial portion of the volume going through the swaps dealers is commercial activity. So therefore making the assumption that 71 percent of the volume on NYMEX WTI is speculative is incorrect.

Secondly, it was said a number of times by the first panel, particularly by Mr. Masters, that there is no position limits on WTI crude. Again that is a false statement. We do have hard position limits on the last 3 days before expiration, and we do have position accountability then out the remainder of the curve.

There was another comment that said there were margin loopholes and I know there was a debate about what to do with margins, but certainly there are no margin loopholes. Every market participant in our market is charged the same margin that is evaluated every day by our staff. It's determined based upon volatility in the market, and every market participant pays that price. There are no loopholes.

And then I guess the final thing I would say, there has been a lot of question about the flight from U.S. markets depending upon what might happen with further regulation. I can tell you with 100 percent certainty if we overregulate these markets there will be a flight away from these markets.

Dr. NEWSOME. It has happened in the past. It will happen again. Maybe not necessarily to other exchanges, but certainly to the over-the-counter marketplace, which dwarfs the size of our markets now. There is no question in my mind that we will lose business to the over-the-counter marketplace.

Mr. MELANCON. And I don't think that you are concerned with competition. It is just fair competition. Would that be a fair assumption?

Dr. NEWSOME. Absolutely. We just want a level playing field.

Mr. MELANCON. Thank you. Thank you, Mr. Chairman. I yield back my time. Thank you, Mr. Newsome.

Mr. STUPAK. Thank you. Thank you, Mr. Melancon. Mr. Burgess has asked that we put in the December 15, 2000, Congressional Record Senate side. Without objection, that will be added. Mr. Burgess also asked a CRS report on Commodity Futures Modernization Act of 2000: Derivatives Regulation Reconsidered, dated January 29, 2003. When the whole thing is provided, we will put it in the part of the record. A few more questions before I wrap up here, if I may. Mr. Newsome, when do you expect the West Texas Intermediate crude oil contract to be listed on the Dubai exchange?

Dr. NEWSOME. Mr. Chairman, no date has been set.

Mr. STUPAK. What is causing delay of not putting it on there then? That is the intent, isn't it, to put it on there?

Dr. NEWSOME. That is the intent certainly is to put it on. But that will be listed on the electronic system supplied by NYMEX. It is not in the queue yet to be listed, so we are months away.

Mr. STUPAK. So the clearing of these trades then will be listed on your computers on NYMEX?

Dr. NEWSOME. Yes.

Mr. STUPAK. OK. With over 60 percent of the WTI contracts traded on ICE Futures originate in the U.S., given the preponderance of trades on this exchange originate in the U.S. and involve contracts with U.S. delivery points, why shouldn't the CFTC require ICE Futures to register as a designated contract market?

Dr. NEWSOME. Thank you for that question, because I appreciate the chance to comment on it. We think when we look at the marketplace and what is important with regard to transparency through the large trader reports, limiting the role of speculators in the market, that the items outlined in at least one of the Senate bills and by the CFTC are adequate without requiring ICE to become a designated contract market. Certainly a concern from our standpoint is that if that was required, then U.S. exchanges would then be retaliated against by foreign jurisdictions and required to become full registrants in every jurisdiction around the world that we want to do business in.

Mr. STUPAK. If you are doing business in Dubai, and if you are going to be selling product in Dubai intended for Dubai, why shouldn't you come underneath Dubai law and not U.S. law?

Dr. NEWSOME. Well, we are currently fully regulated by the Dubai Financial Services Authority and by the CFTC because of the nature of the way we set up the business.

Mr. STUPAK. So then it shouldn't make any difference then.

Dr. NEWSOME. Well, I mean there is a lot—there are a number of markets around the globe much larger than the Dubai marketplace. And if we had to go to every foreign jurisdiction and go through the regulatory process it would cost us millions and millions of dollars and lots of time. If there wasn't a method to achieve what we think is needed in terms of transparency and position limits, I would agree completely with you. But I think we have a methodology through the conditioning of the foreign board of trade no-action letter to achieve what needs to be achieved.

Mr. STUPAK. OK. NYMEX Holdings is about to become a foreign board of trade in the United Kingdom, isn't it?

Dr. NEWSOME. We are going through that process now.

Mr. STUPAK. So will this exchange mirror the same contracts on ICE Futures such as west Texas crude, heating oil, gasoline?

Dr. NEWSOME. I think Professor Greenberger was three or four steps in front of us. First of all, we are very proud to be a U.S. entity and regulated by the CFTC, and that will not change. With regard to our efforts in the United Kingdom, what we are trying to do is get on a level playing field in the European marketplace with the Intercontinental Exchange.

Mr. STUPAK. It sound likes you are saying if I can't beat 'em, I might as well join 'em.

Dr. NEWSOME. Only with regard to the European marketplace.

Mr. STUPAK. Well, will you be applying for a no-action letter and tell the CFTC it is about to become a foreign-owned trade——

Dr. NEWSOME. We will supply—regardless of what we do where, we will always supply the position limits and the large——

Mr. STUPAK. So you won't be applying for a no-action letter? You won't apply for a no-action letter?

Dr. NEWSOME. Well, we could.

Mr. STUPAK. Sure you could.

Dr. NEWSOME. But if we do, we will condition it up front to supply the information to the CFTC that we have asked them to collect from ICE.

Mr. STUPAK. OK. You know, you said that if we regulate that these markets will go offshore. But first of all, any futures contract that calls for a physical delivery inside the U.S. is automatically subject to CFTC regulation, right?

Dr. NEWSOME. Correct.

Mr. STUPAK. So even if they are offshore, but if the contractis going to be for physical delivery within the U.S., they are still going to come underneath CFTC authority.

Dr. NEWSOME. Not necessarily. Only if they apply for the no-action letter to have access to U.S. customers.

Mr. STUPAK. OK. But the questions was, statement was a future contract that calls for physical delivery in the U.S. comes underneath our jurisdiction.

Dr. NEWSOME. If it was a physical contract——

Mr. STUPAK. Right. So whether I am on Dubai or on your London Holdings, as long as the physical delivery is going to be in the U.S., it comes underneath the U.S. law, right?

Dr. NEWSOME. Absolutely.

Mr. STUPAK. So there isn't going to be a foreign flight if we do this regulation. If we pass H.R. 6330, the PUMP Act of 2008, that is not going to drive people out of this market here, is it?

Dr. NEWSOME. No, I think it will because most of the foreign boards of trade are going to list a cash contract that is based on a physical U.S. contract, not the actual physical.

Mr. STUPAK. But any future contract that cash settles against a U.S. contract with physical delivery provisions is also automatically subject to CFTC regulation.

Dr. NEWSOME. No, sir. The other exchange in Dubai that has listed the WTI contract does so completely outside the purview of the CFTC because they have not applied for a no-action letter to have access to U.S. customers. So they can list any contract U.S.-based that they want to completely outside the purview of the CFTC or any U.S. regulator.

Mr. STUPAK. Professor, I know you want to jump in there.

Mr. GREENBERGER. Yes, I want to jump in on two points. Mr. Newsome said I am a couple steps ahead of him. In his testimony he said while that affiliate, the London affiliate, will follow the path of other exchanges regulated by other regulators and will be applying for CFTC no-action relief. So I am not two steps ahead. I just read his testimony.

Dr. NEWSOME. I thought you were making the assumption that we are going to transfer all of our NYMEX business.

Mr. GREENBERGER. No, no, no, no. All I meant was you are going to apply for relief, sell West Texas Intermediate, it will be regulated by the FSA directly instead of by the United States. I don't know what your share is going to be between your U.S. and U.K. Exchange. Now with regard to the Dubai exchange that has not gotten a no-action letter, Mr. Newsome says, oh, they are outside of the CFTC jurisdiction. No, they are not. I briefed that completely in the testimony. The leading case in CFTC enforcement jurisdiction is a Japanese copper trader trading on the London Metal Exchange and driving up the price in the United States. No contacts or virtually none to the United States. A U.S. warehouse here, what have you.

The CFTC imposed a $150 million enforcement action on Sumitomo, the Japanese corporation trading on the London Metal Exchange. If you harm our markets, we can go after you. The Justice Department has memos on this. The CFTC has memos. And that is the irony here. ICE is in the United States. We don't have to go to London to get them. Mr. Newsome tells you that Dubai is going to do all this stuff, now, Mr. Newsome is in partnership with Dubai. My argument is if he is in partnership with Dubai when

Dubai comes to the United States, that is a United States entity if Mr. Newsome is in partnership with them. And he says, well, we will impose this, we will impose that. Great. But that is not U.S. law. He is doing that as a matter of largesse. Maybe Mr. Lukken will enforce that through his enforcement things. But I want to tell you when your gas-paying constituents come to you and say is Dubai, is ICE, is London NYMEX going through London and coming back to the United States fully regulated as a U.S. exchange would be, the answer is no. The foremost reason is I read you the emergency authority. Mr. Lukken will not have emergency authority to go in an emergency and tell ICE what it ought to do, set temporary margins, temporary position limits. You are not going to be fully regulated. If you want U.S. trading terminals with U.S.-delivered contracts on them to be fully regulated, you have the power to insist.

The final point I would make is this idea that everybody is going to run abroad, I mean, Mr. Newsome is going to London because he wants to get the same loophole that ICE has by going through London. But there are 20 foreign exchanges who came to the United States and said please let us trade here, but don't have us regulate fully. Why are they here? As the first panel said, it is the only fully liquid profitable market in the world. Everyone needs to be here. And if they go abroad and they do bad things to our gas-paying consumers we can go after them under U.S. law.

Mr. STUPAK. Sure. And from a practical point of view, you need liquidity, you need critical mass. And we are 3 percent of the world population, but consume 25 percent of the oil. So, I mean, you are going to trade here no matter what. I don't think you are going to go abroad.

Mr. GREENBERGER. You need liquidity and you need mass, but you also need profits. And this is where the futures trading gets done on U.S. delivered West Texas Intermediate delivered in Cushing, Oklahoma.

Mr. STUPAK. Sure. Largest consumer of energy and largest producer of food commodities.

Mr. GREENBERGER. Exactly.

Mr. STUPAK. There you are. Mr. Newsome wanted to add.

Dr. NEWSOME. I would like to respond, Mr. Chairman, to that if I can. Several things. One, as I made the comments in my statement, I said there is a very real threat of that business leaving the regulated exchanges. I said it could go to foreign exchanges, but more likely than not it would go to the over-the-counter market. There is no question about that. With regard to the Dubai Exchange that is in question, in no way are they or will they be regulated by the CFTC. You should not be misled there.

If there is some type of manipulative activity that occurs that has an impact on U.S. markets, Mr. Greenberger is exactly right, then the CFTC has a hook to go after them from an enforcement standpoint. But in no way are they regulated by the U.S. And then with regard to London, I simply can't let Mr. Greenberger tell you what our business plan is in London when he is not aware of what it is. He has made some assumptions that are wrong. Our plans to go into London is simply onefold. There are differences in law with regard to clearing the business. We tried from New York on a number of occasions to list the London contracts, the European contracts, and to pull that business to the CFTC-regulated marketplace. Because of differences in clearing, particularly with regard to bankruptcy, it was very difficult for us to compete in that marketplace.

So we made the decision to partner with the London clearinghouse, who is a London clearer, to list those same contracts so that we could do a more effective job of competing in the European space period.

Mr. STUPAK. Mr. Burgess, questions?

Mr. BURGESS. Yes, thank you, Mr. Chairman. Dr. Newsome, Mr. Greenberger, just so I am clear that I understand, first on the issue of the West Texas Intermediate, my understanding was back in, I guess, 1974 those contracts had to be delivered to Oklahoma, and that was a method of keeping speculation in check during the Arab oil embargo of the 1970s?

Dr. NEWSOME. No, I mean we have had speculative position limits on that contract since it was listed day one.

Mr. BURGESS. OK. Then the look-alike that you reference on the Dubai market, the way that the CFTC would still have the ability to regulate that is they can take action against Dubai if they see evidence of bad behavior. Is that correct?

Dr. NEWSOME. They would have complete transparency and position limits to keep the speculative activity low. If there was an enforcement option, they would have to cooperate with the Dubai Financial Services Authority.

Mr. BURGESS. And what does that enforcement action look like? If that were to happen, what would we see?

Dr. NEWSOME. It would depend upon what kind of activity was taking place in the market. If it was manipulative activity on Dubai that had an impact on the U.S. markets, as Mr. Greenberger commented on a moment ago, they could go after those market participants. If it is related——

Mr. BURGESS. And what is the enforcement hook that they have? What would they do?

Mr. GREENBERGER. If they are impacting U.S. markets and they can get jurisdiction over those people, as they got over the Sumitomo Japanese copper company, they will fine them $150 million and reference them to the Justice Department for prosecution if they feel that is the case. And my point isn't that the Dubai Gold Exchange, which is different than Mr. Newsome's partner, which is selling West Texas Intermediate exclusively in Dubai, is not that they have to become CFTC-regulated, but what everybody is telling you is if you regulate here we are going to run somewhere else in the world to avoid transparency. And what I am saying is the only reason they are going somewhere else is to continue operating in dark markets. And if they think they are outside of U.S. jurisdiction, they are not. We can go after them there, and we have when there has been effective enforcement at the CFTC.

Mr. BURGESS. I think that was the thrust of Mr. Masters' testimony. I don't want to put word in his mouth, but I think he so much as said that in the first panel this morning. But going back, of course, to Chairman Dingell when he was stressing or trying to get an answer about the question of transparency, again, if CFTC sees a problem, if the transparency is there, if CFTC sees the problem they can go after it. So the transparency then becomes the key to this whole process.

Mr. GREENBERGER. Well, the only addition to that is if Mr. Newsome has an emergency on his exchange, the CFTC can go there, set temporary position limits, temporary this, temporary that. If it happens on ICE, they have got to go to the FSA to ask the FSA to do it. Go to London to have the FSA do something in the United States, or go to Dubai to ask Dubai—for example, if we have a $11 rise in a single day and everybody goes nuts and the CFTC is enforcing and says we want to go in there and see what is happening, Dubai is going to have terminals in the United States, but they are going to have to go to the Dubai Financial Services Authority and ask them if it is OK if they look into the matter. There is a big difference between getting large trader data reporting from Dubai and be able to directly regulate things that are happening before your very eyes instead of having to go to Dubai and ask permission to do so. And as Mr. Newsome just said, if you see manipulative activity you have to go to Dubai to see whether you can enforce.

Mr. BURGESS. Sir Robert, we will give you the last word.

Mr. REID. One needs to correct a bit of reality as opposed to fiction.

Mr. BURGESS. Please.

Mr. REID. If there is a problem that worries the CFTC, they pick up the phone and they speak to the chief executive in our organization or they speak to the FSA. This is an open line. And it operates two, three times a week. So these people know each other and they deal with the problems. And really to describe it as you have to go cap in hand to Britain to actually get information, I actually think you are completely misrepresenting the position. Now, what I would say, in fairness to Dubai, Dubai is a new organization, it is a new country, but it really is trying to do the best it can. And I am sure the fact that NYMEX has gone there, they will help them with that. And essentially, you should get a regime there which is every bit as good as you will get in London. And so therefore, you are contributing to the development of global trade. It may be uncomfortable for the people who want to stay domestic, but basically for those who want to go international and have got an entrepreneurial flair like Jim, then let them go and support them.

Mr. BURGESS. At the same time, though, the degree of transparency that we are all talking about is dependent on the CFTC's enforcement ability. I am not reassured that someone can pick up a phone and call someone else half a world away. You may have that level of trust, but certainly after 6 hours of hearings today I don't have that. But thank you, Mr. Chairman. You have been very generous with the time. And I will yield back.

Mr. STUPAK. Mr. Melancon, anything?

Mr. MELANCON. No.

Mr. STUPAK. OK. That is going to conclude this panel. Professor, you look like you want to say something.

Mr. GREENBERGER. I just wanted to say one other thing. Sir Robert says you can pick up the phone. The CFTC negotiated for several weeks to lead to the letter they just issued. They didn't pick up the phone. They had to do a diplomatic negotiation.

Mr. REID. OK, just one final word on that.

Mr. STUPAK. Sure, Sir Robert. You came the farthest so you get the last word.

Mr. REID. If you could put on the record we are not a loophole, we are a reef note. We are firm and stable and secure.

Mr. STUPAK. That is on the record. It is so noted. I am not saying you are going to get agreement with this committee, but so noted.

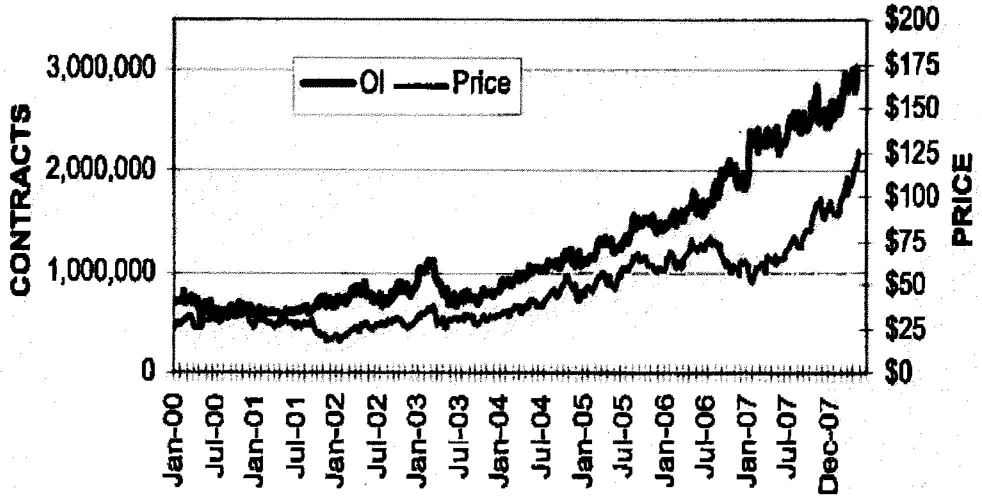
Mr. REID. Thank you, sir.

Mr. STUPAK. Well, thank you. That concludes all questions. I want to thank all of our witnesses for coming today and for your testimony. It has been a long, but very interesting hearing. I ask for unanimous consent that the hearing record will remain open for 30 days for additional questions for the record. Without objection, the record will remain open. I ask unanimous consent the contents of our document binder be entered into the record. Without objection, the documents will be entered in the record. I also ask unanimous consent that the letter we received from the U.S. Commodities Futures Trading Commission dated June 20th, 2008, addressed to myself and Mr. Dingell, be made part of the record. I also ask unanimous consent that this report from CS Commodities Group, Update and Key Commodity Themes for 2008, it is a report referenced by Mr. Masters in the first panel, be made part of the record. Without objection, these two documents will be added. That concludes our hearing. Without objection, this meeting of the subcommittee is adjourned.

[Whereupon, at 6:24 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

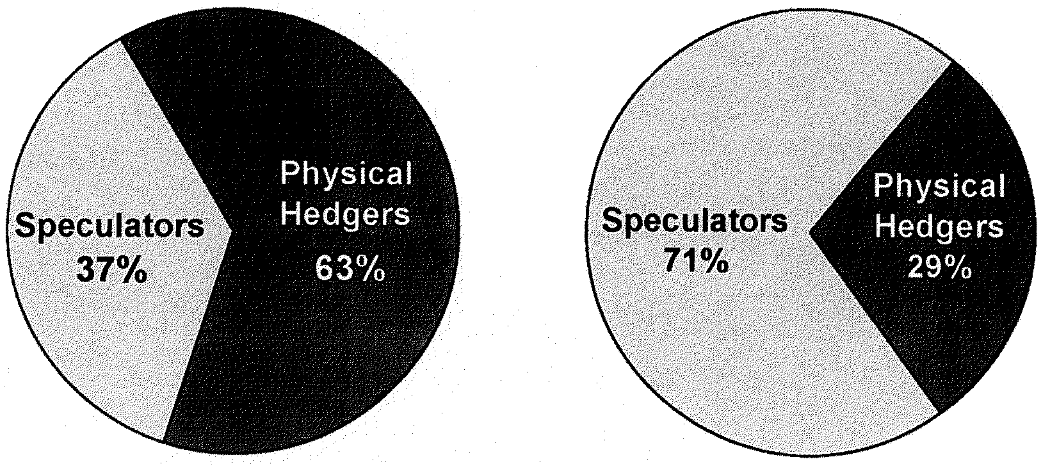
NYMEX TOTAL CRUDE OIL OPEN INTEREST
Vs. Nearby NYMEX Futures



SOURCES: CFTC FUTURES AND OPTIONS COMBINED, CQG

Care of Citi Futures Perspective

Speculators Now Dominate WTI Crude Oil Trading on NYMEX



January 2000

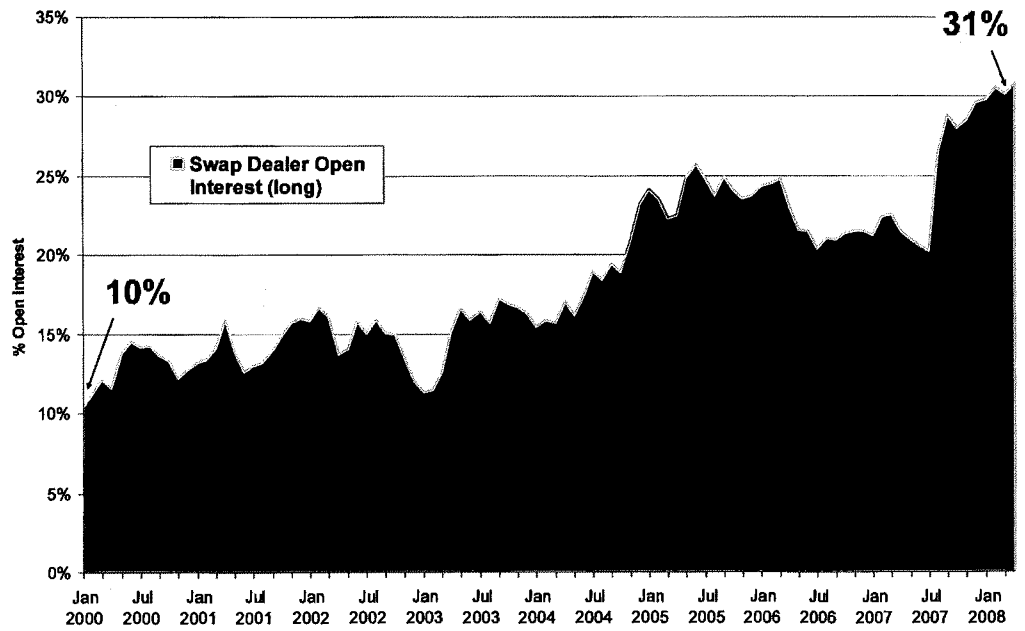
April 2008

*WTI average open interest, long positions
Source: Estimates based on CFTC Data, Office of the Chief Economist

Swap Dealers Growth Triples in Eight Years

WTI Open Interest on NYMEX (Long)

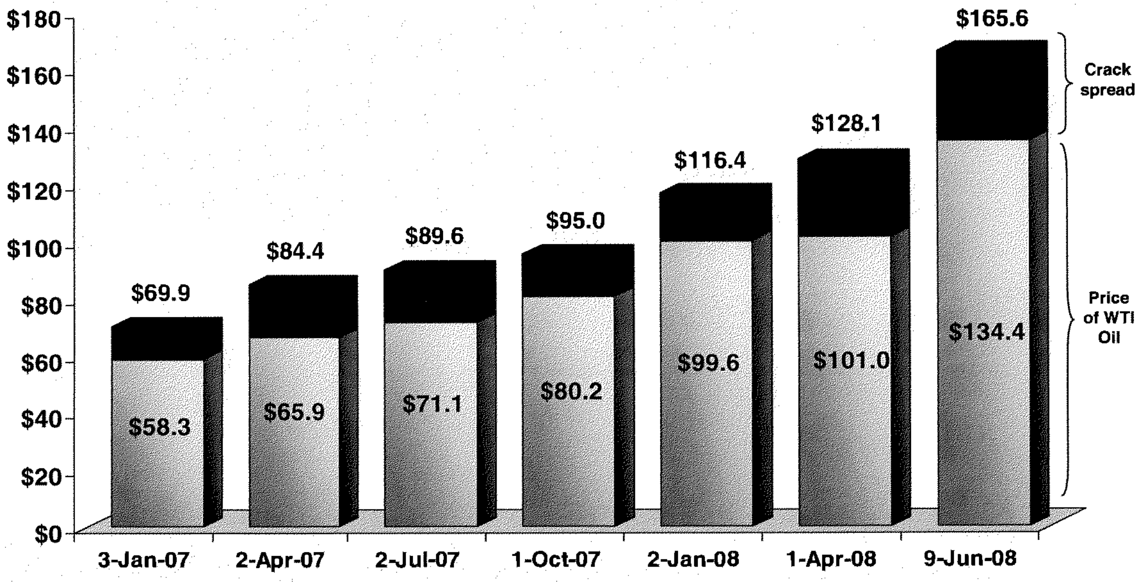
January 2000 - April 2008



Source: CFTC Data, Office of the Chief Economist

JET FUEL - A NEW REALITY

Jet Fuel Price
($ per barrel)



Continental Airlines

indicates that they are primarily an identified banking product and not a contract, agreement or transaction appropriately regulated by the CFTC. While the statute provides a mechanism for resolving disputes about the application of this test, there is no intent that a product which flunks this test be regulated by anyone other than the CFTC.

Once again, I commend Chairman LUGAR and Congressman TOM EWING, the Chairman of the Subcommittee on Risk Management; Research and Specialty Crops, as well as all staff involved for their outstanding work in making this important legislation a reality.

EXHIBIT 1

DECEMBER 15, 2000.

Hon. TOM HARKIN,
Ranking Member, Committee on Agriculture, Nutrition, and Forestry U.S. Senate, Washington, DC.

DEAR SENATOR HARKIN: The Members of the President's Working Group on Financial Markets strongly support the Commodities Futures Modernization Act. This important legislation will allow the United States to maintain its competitive position in the over-the-counter derivative markets by providing legal certainty and promoting innovation, transparency and efficiency in our financial markets while maintaining appropriate protections for transactions in non-financial commodities and for small investors.

Sincerely,

LAWRENCE H. SUMMERS,
Secretary, Department of the Treasury.
ARTHUR LEVITT,
Chairman, Securities and Exchange Commission.
ALAN GREENSPAN,
Chairman, Board of Governors of the Federal Reserve.
WILLIAM J. RAINER,
Chairman, Commodity Futures Trading Commission.

INCREASING THE FEDERAL DEPOSIT INSURANCE LEVEL

Mr. JOHNSON. Mr. President, I rise today to briefly discuss S. 2589, the Meeting America's Investment Needs in Small Towns Act, or the MAIN Street Act as I call it. Not only is Main Street the acronym formed by this title, but it goes to the heart of why this legislation is necessary.

As we move into the new economy, money is flowing from our small towns and communities to the larger financial markets. While each individual investment decision may make sense, the cumulative effect is a wealth drain from rural America. Money invested in Wall Street is not invested on Main Street. Wall Street wizards can work wonders with a portfolio, but they don't fund a new hardware store down the street. They don't go the extra mile to help a struggling farmer whose family they have served for years. And they don't sponsor the local softball team.

By increasing the federally insured deposit level, we can help community banks and thrifts compete for scarce deposits. My legislation will account for the erosion to FDIC-insured levels from 1980. It will index these levels into the future, protecting against further erosions.

Under current calculations, the immediate impact would be to almost double the insured funds, from $100,000 to approximately $197,000. The long range impact of this legislation would be to make locally based financial institutions more competitive for deposits, help stem the dwindling deposit base many areas face, and lead to new investments in our communities.

Congress last addressed the issue of a deposit insurance increase in 1980. At that time, we increased the insured level from $40,000 to $100,000. Congress has not adjusted that level since 1980. In real terms, inflation has eroded almost half of that protection.

Every bank or thrift customer knows that the FDIC insures deposits up to $100,000. For many people, that notice symbolizes that the financial might of the United States government stands behind their banking institution. We learned the hard lessons of the 1930s, and created the FDIC to protect and strengthen our financial system.

In rural communities across America, local banks serve as the hub of the town. Every business in town relies on the bank for funding. The banker knows the town, and the town knows the banker. In many ways, each knows it disappears without the other.

Individuals in these towns like to know who is handling their money. They like the idea that their funds are secure in their home town. And, they like the fact that their money can be leveraged into other investments that will improve their communities. The more deposits a bank has, the more loans it can make. These loans are made locally, and serve as an investment in local communities.

The MAIN Street Act will help preserve these small towns and communities. It will bring greater liquidity to community banks and promote growth and development. I look forward to working with the FDIC and other banking leaders as we seek to update our banking insurance protections to allow small banks to compete with other investment opportunities available. I ask unanimous consent to have printed in the RECORD an article by Bill Seidman which further outlines some of the issues surrounding federal deposit insurance.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

$200,000 OF FDIC INSURANCE? THE BATTLE HAS JUST BEGUN

The battle is on—in one corner there's the proverbial David in the person of the FDIC Chairman Donna Tanoue, and in the other corner, three giant Goliaths—Senate Banking Committee Chairman Phil Gramm, Treasury Secretary Lawrence Summers, and Federal Reserve Board Chairman Alan Greenspan

Technically the conflict is over the FDIC's Deposit Insurance Option Paper (published in August), which suggested (some said foolishly) that deposit insurance coverage should be increased from $100,000 to $200,000 per depositor. As the paper pointed out, such an increase would compensate for the last 20 years or so of inflation since the insurance level was set at $100,000. The new ceiling might also help to meet an increasingly difficult problem for community banks—obtaining sufficient deposits to meet growing loan demand. Core deposits as a source of funding for community banks have steadily declined and largely are being replaced by loans from the Federal Home Loan Banking System.

Once this idea was floated, Senator Gramm, and ever-pure free marketer, reacted with a resounding "No way—not on my watch!" At a recent Senate committee hearing (on an unrelated subject) Gramm gained support for his position from the secretary of the Treasury and the Fed chairman. Treasury said it doesn't agree with the proposal because it increases risk taking and possible government liability; Greenspan said "no" because he feels it's a subsidy for the rich. (I guess he's been in government so long that anyone who has over $100,000 is really rich.)

Do these opinions nix the possibility for a change in the deposit insurance ceiling? I don't believe so. This is a complex issue that will require congressional hearings and much research, because it relates to "too big to fail" policies and overall financial reform. Here are some of the important points to be weighed in this debate.

Increasing deposit insurance brings more financial risk to government—Possible, but unlikely, since the bank insurance fund has never cost the Treasury a penny (the thrift insurance fund is the one that went broke. Even Chairman Tanoue and Fed Governor Meyer have pointed out that the greatest risk to the fund is likely to be the failure of a large complex bank. Moreover, the risk is much greater to the federal government when it supports a huge home loan bank financing institution (another quasi-governmental agency such as Fannie Mae or Freddie Mac)—where any trouble means big trouble.

It distorts the operations of the free market—This is also referred to as creating a "morale hazard," the idea being that FDIC depositors won't have to worry about the condition of the bank. Of course, the so-called free market is out of kilter anyway, what with the Federal Reserve's discount window and the Treasury's bailout of Mexico and half of Asia through the IMF. In fact, the government seldom does anything that doesn't impact the free market (think environmental protection, antitrust, regulation of good drugs, bad drugs, and so on). The issue of whether to increase the deposit insurance ceiling has less to do with distortion of the free market than it does with whether this particular action in total is "good for the country." (In the case of Mexico, for instance, the free marketers decided that a U.S. bailout of rich U.S. business leaders was good for the country and the world; bingo, the funds were granted.)

It's a subsidy for the rich—It's debatable whether FDIC insurance is a subsidy at all. Most economists (though not Greenspan) doubt that there is much of a subsidy because the banks have paid for all of the insurance and the insurance fund has covered any losses.

Now that I've laid out the opposing views, here are several good reasons for approving the FDIC deposit guarantee increase:

It will level the competitive playing field—Historically, governments have protected all bank depositors when very large banks are in trouble, thus providing an implicit guarantee of unlimited insurance for those institutions (e.g., Japan, Saudi, Korea, Thailand,

U.S. Commodity Futures Trading Commission
Three Lafayette Centre,1155 21st Street, NW, Washington, DC 20581
www.cftc.gov

Bart Chilton
Commissioner

(202) 418-5060
(202) 418-5620 Facsimile
bchilton@cftc.gov

June 20, 2008

The Honorable John D. Dingell, Chairman
Committee on Energy and Commerce
United States House of Representatives
2328 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
United States House of Representatives
2352 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairmen Dingell and Stupak:

Thank you for your leadership in addressing critically important questions regarding energy markets. I appreciate your holding a hearing to question and analyze these issues, and I appreciate your efforts to provide additional transparency to America's commodity markets to protect consumers and businesses, and to ensure that these markets provide price discovery and risk management functions as intended by Congress.

As I have stated, I believe that there is a significant speculative presence in the oil futures market, and that this cannot help but have an effect on price. My concern is that there have as yet been no studies that accurately quantify the amount or extent of this effect. I believe this should be undertaken, by independent and neutral parties, as promptly as possible. I also believe that we need to study the effect of largely long "passive" speculative investors, along with a review of their classification under commodities laws and regulations, to ensure that their trading does not have a deleterious effect on the legitimate price discovery and risk management functions of the futures markets.

I also want to ensure that the Commission has the ability to identify the beneficial owners of all positions taken in commodities markets. To date, I do not believe that this issue has received adequate attention to any extent, and it may be desirable to direct that further study be undertaken to ensure that sovereign wealth funds are acting solely to benefit their market positions, and not for any geopolitical or other reason.

Again, I thank you for your leadership in this area, and I look forward to working with you on this and other issues of significance to American consumers and businesses.

Sincerely,

Bart Chilton
Commissioner

cc: Congressman Joe Barton
Congressman John Shimkus

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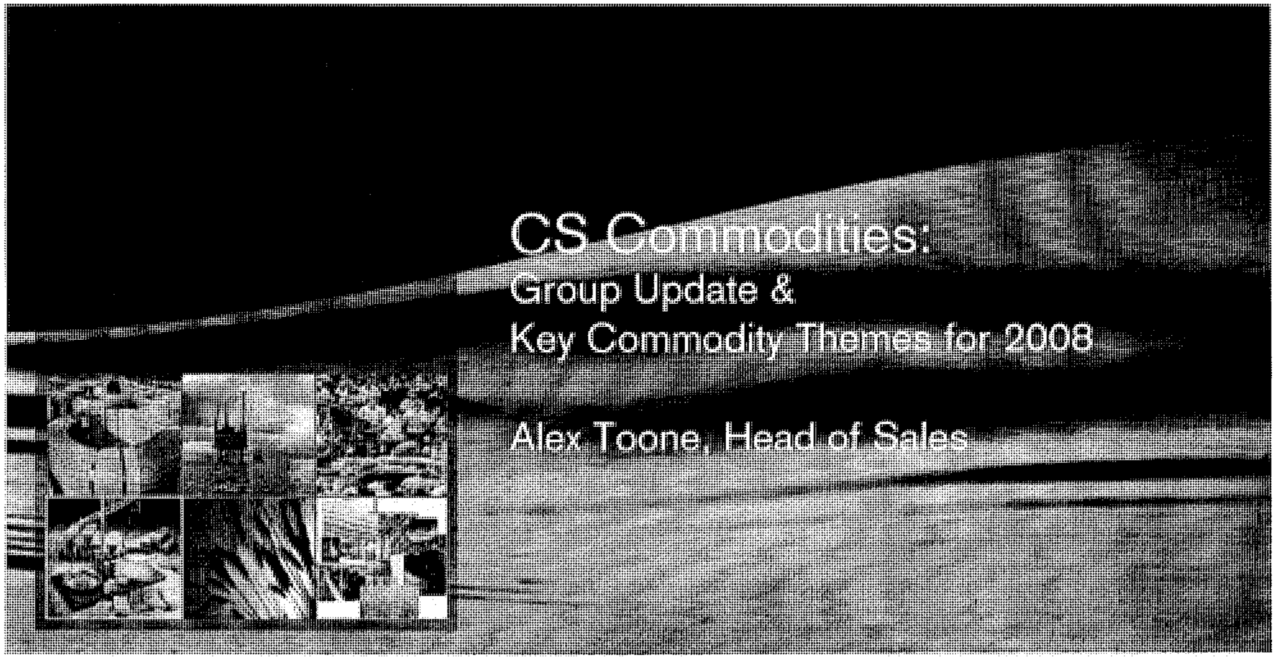
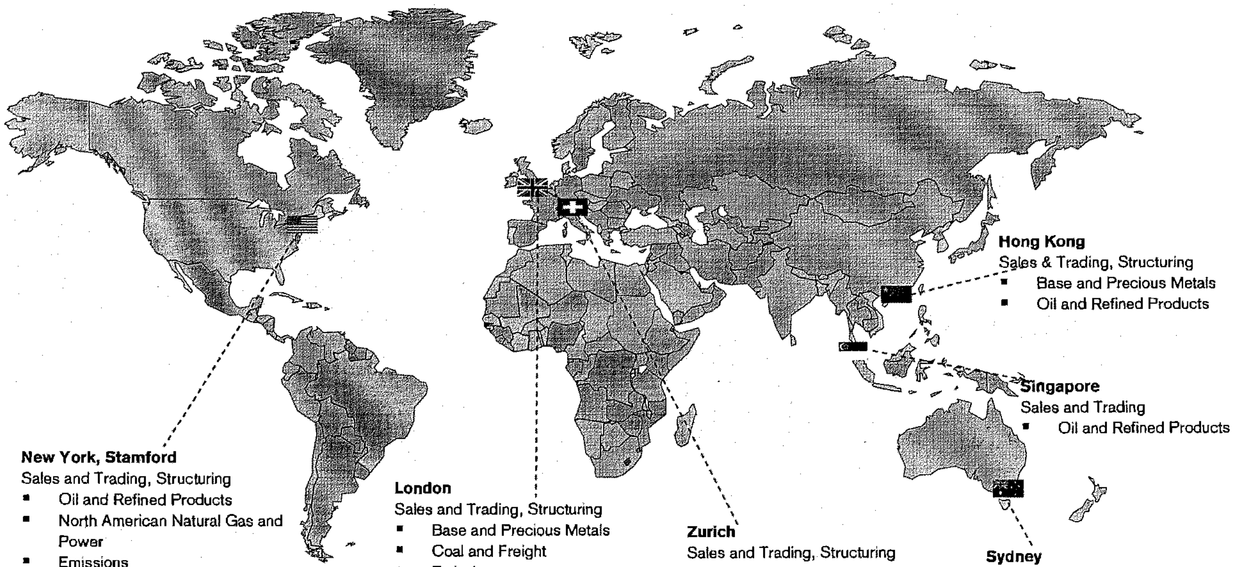


CS Commodities:
Group Update &
Key Commodity Themes for 2008

Alex Toone, Head of Sales

Global Commodities Presence

- **Credit Suisse** has built a **fully-integrated Commodities business** over the last 3 years across energy (power, gas, coal and oil), metals, minerals, carbon emissions, freight, and soft/agricultural commodities



New York, Stamford
Sales and Trading, Structuring
- Oil and Refined Products
- North American Natural Gas and Power
- Emissions
- Agricultural Commodities
- Indices

London
Sales and Trading, Structuring
- Base and Precious Metals
- Coal and Freight
- Emissions
- Agricultural Commodities

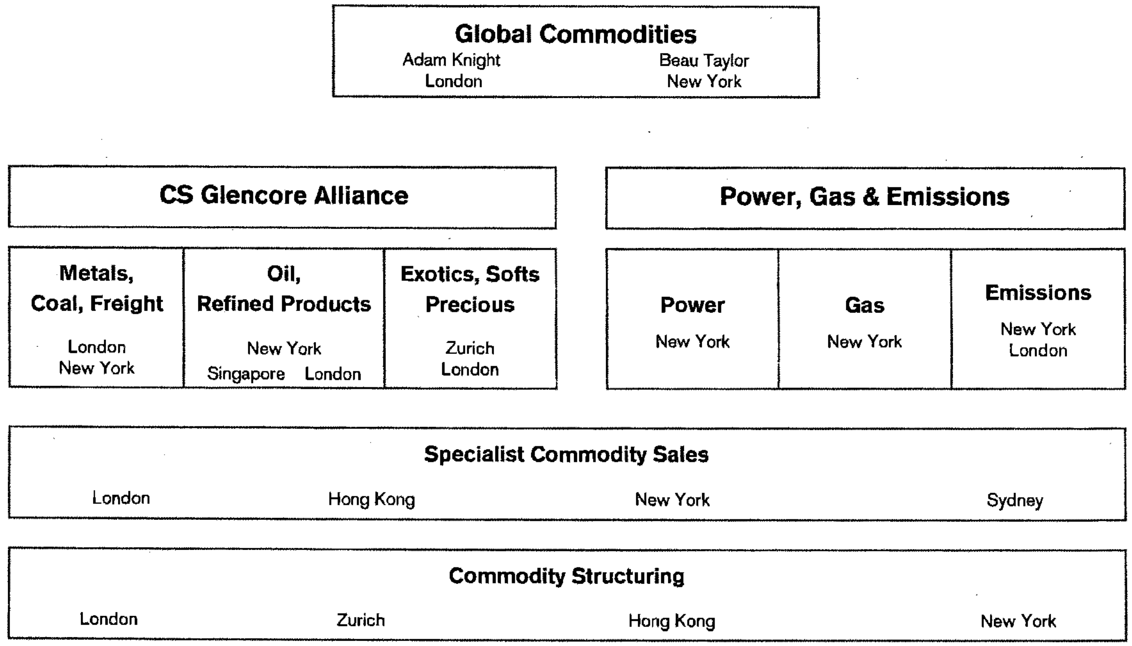
Zurich
Sales and Trading, Structuring
- Exotics
- Cross Commodities

Hong Kong
Sales & Trading, Structuring
- Base and Precious Metals
- Oil and Refined Products

Singapore
Sales and Trading
- Oil and Refined Products

Sydney
Sales
- Base and Precious Metals

Organisation



Global Commodities
Adam Knight, London
Beau Taylor, New York

CS Glencore Alliance

- **Metals, Coal, Freight**: London, New York
- **Oil, Refined Products**: New York, Singapore, London
- **Exotics, Softs Precious**: Zurich, London

Power, Gas & Emissions

- **Power**: New York
- **Gas**: New York
- **Emissions**: New York, London

Specialist Commodity Sales
London, Hong Kong, New York, Sydney

Commodity Structuring
London, Zurich, Hong Kong, New York

Range of Underlyings

Oil and Refined Products

- WTI Crude oil
- Brent Crude oil
- Heating oil
- Fuel oil
- Unleaded gasoline
- IPE gasoil
- Jet fuel
- Naphtha
- Crack spreads
- Other crude grades
- Other
- Light/med distillates

North American Gas and Power

US Gas
- NYMEX Henry Hub
- East / West Gas
- Canada Gas
- Seasonal spreads
- Calendar spreads
- Physical

US Power
- East / West / South Power
- ERCOT Power
- Off peak / zonal products
- Spark spreads
- Tolls
- Physical

Metals

Base Metals
- Aluminium
- Aluminium Alloy
- Copper
- Zinc
- Nickel
- Lead
- Tin
- NASAAC

Precious Metals
- Gold
- Silver
- Platinum
- Palladium
- Physical

Minor Metals
- Cobalt
- Molybdenum
- Vanadium
- Rhodium
- Ferrochrome

Bulks
- Iron ore
- Alumina

Emissions

- EU Allowances (EUAs)
- Certified Emission Reductions (CERs)
- Securitisations
- Carbon Project Financings
- SO2

Coal and Freight

Coal
- API #2
- API #4
- NEWC FOB

Freight
- Dry
- Tankers

Softs and Agricultural

- Corn
- Sugar
- Wheat
- Soyabean
- Coffee
- Cocoa

Indices

- S&P – GSCI
- DJAIG

Range of Products

Hedging Solutions

- Forwards
- Fixed rate swaps
- Price caps, floors
- Zero-cost collars
- Extendable swaps / options
- Convertible options
- Swaptions
- 3-way / 4-way
- Exotic hedges
- Structured hedges
- Hedges in foreign currencies

Investment Products

- OTC vanilla and exotic options
- Physical precious metal
- Structured notes
- Basket / correlation products
- Certificates
- Warrants
- Funds
- Index-linked products
- Hybrids (Rates / FX / Equity/ Credit)
- Credit-like structures (CCO)

Trading alliance: Credit Suisse – Glencore

CREDIT SUISSE

- Major player in global financial markets
- Strong derivatives and risk management expertise
- Leader in energy M&A and commodity-linked project finance
- Well-established structured products franchise
- Improved credit rating (Aa3 / AA-)

Synergies from two global powerhouses

GLENCORE
INTERNATIONAL AG

- One of the world's largest physical traders of materials
- Leading market shares in all key physical commodity markets
- Maintains significant worldwide interests in mining, smelting and refining businesses
- Unique knowledge of physical commodity markets

- The Alliance covers energy, metals and agricultural products creating a fully integrated commodities platform spanning a wide range of underlyings
- Provides both risk management (hedging) and investment solutions
- Marries Glencore's leading position in physical commodity trading with Credit Suisse's extensive experience in derivatives
- Combines two unique customer bases to create a diverse portfolio of clients (corporates and financial institutions)
- Leverages Credit Suisse's financing and advisory relationships
- Strengthens Credit Suisse's product offering of structured solutions to investors

Trading alliance: Credit Suisse – Glencore

Top Tier Metals and Coal Business

Information from the world's largest physical commodity trader covering:

- Base Metals
- Coal
- Freight
- Grains / Sugar
- Oil and products

Non-exchange traded commodity exposure:

- Iron Ore / Alumina / Minor Metals – cobalt, molybdenum, ferrochrome, vanadium
  - *OTC cash swaps use benchmarks published on Bloomberg*

Services

- Daily sales/trading comment
- Daily IB
- Trade ideas
- Client meetings or conference calls

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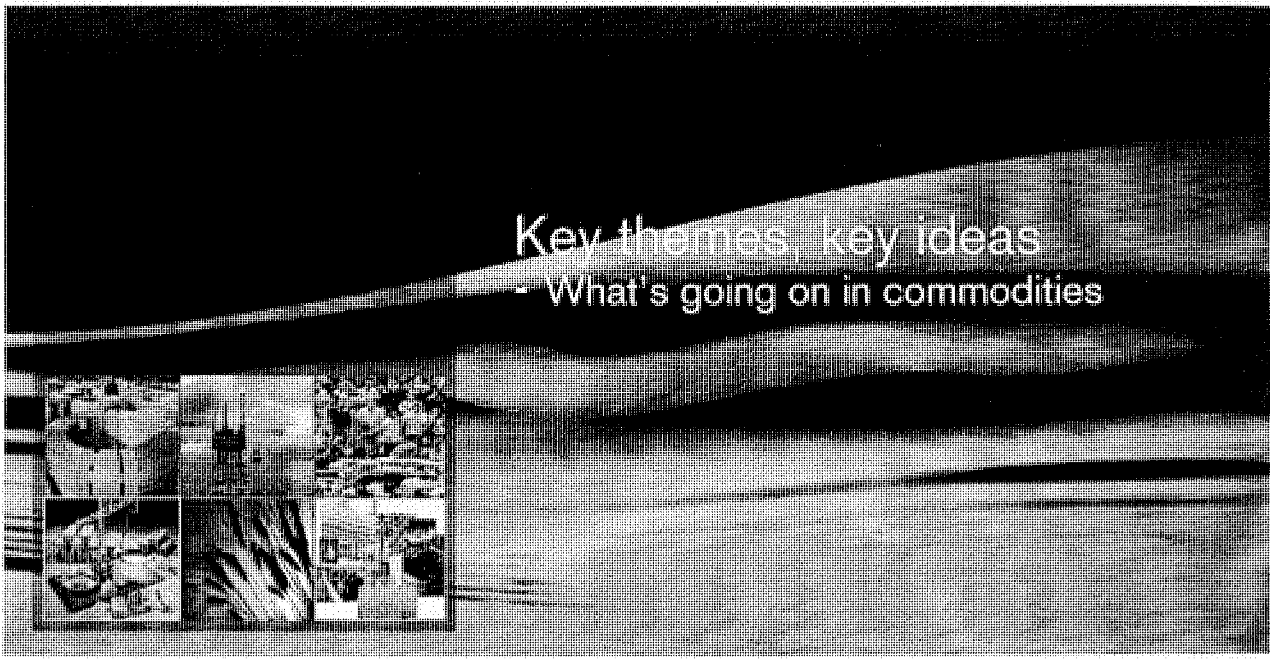


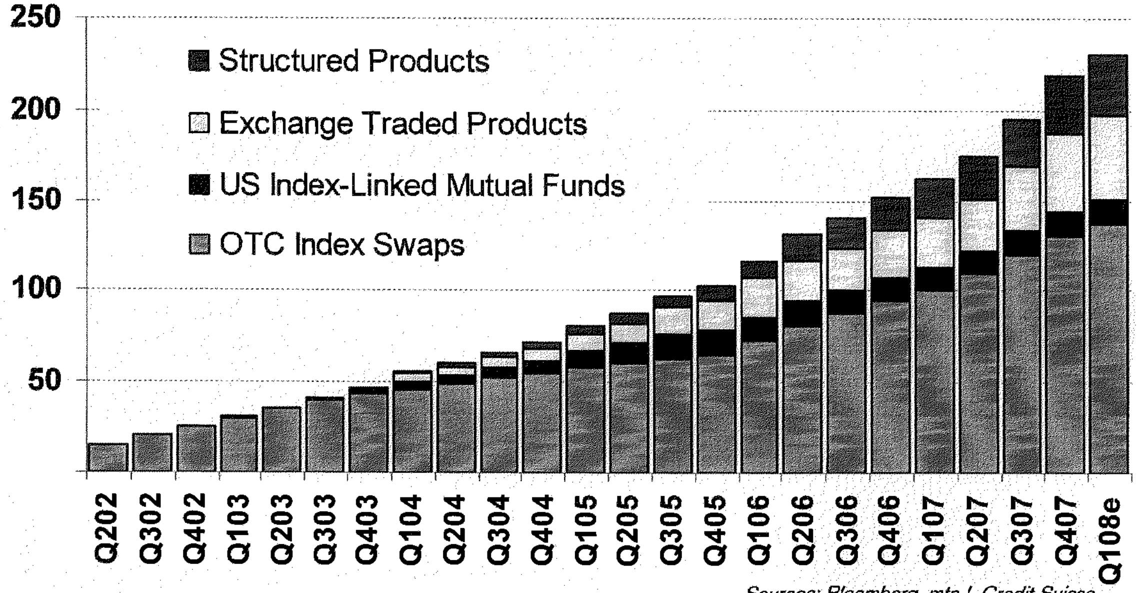
Key themes, key ideas

- What's going on in commodities

Fund flow into commodities has accelerated since 2002…

Commodity Investor Products

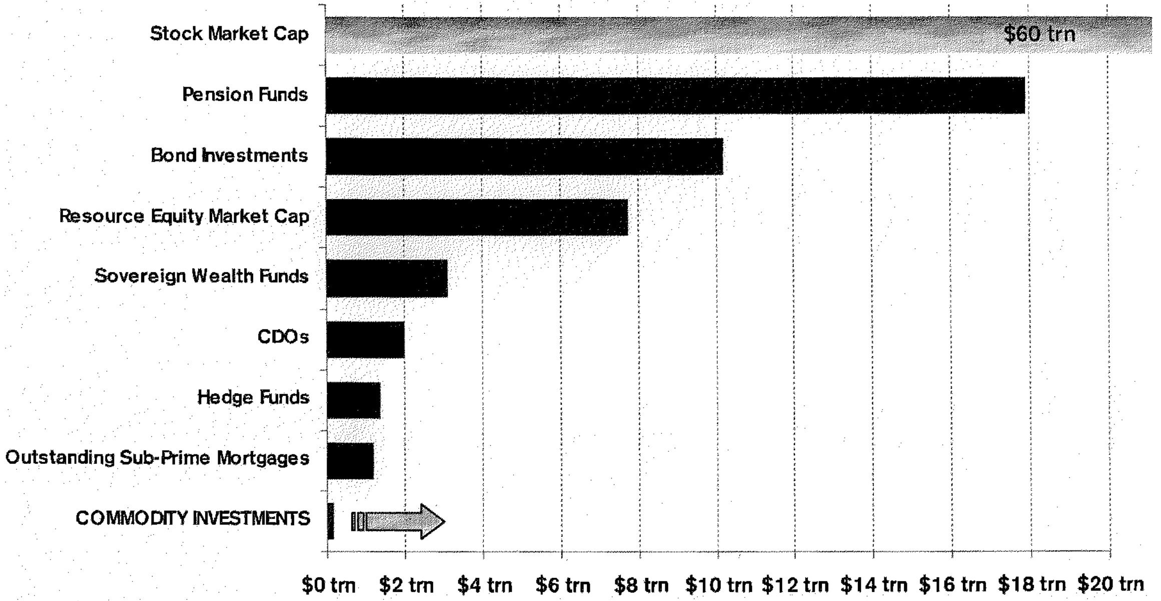
(cumulative AUM US$bn)



Sources: Bloomberg, mtn-l, Credit Suisse

CREDIT SUISSE

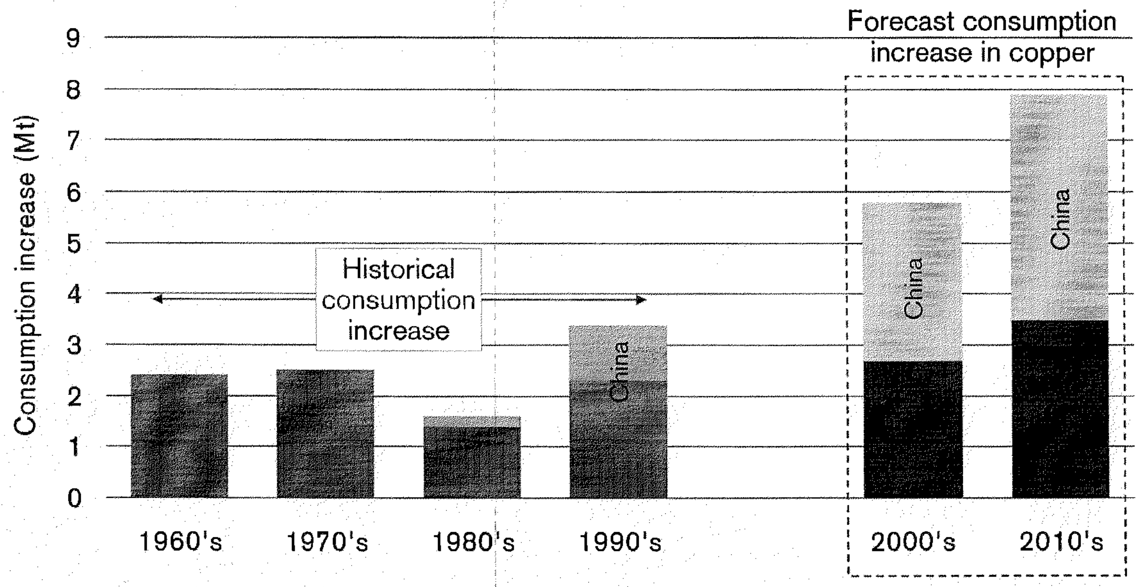
…and the scope for further investment growth is clear



Sources: Bloomberg, Credit Suisse

CREDIT SUISSE

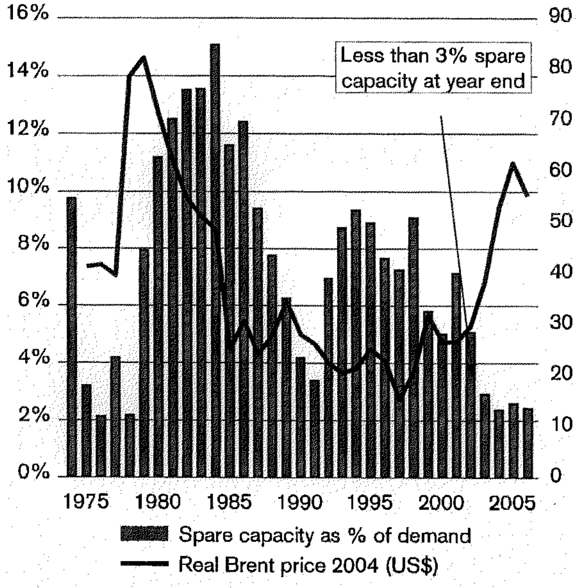
Fundamentals are still very strong! Demand from EM markets have driven a shift higher in resource needs



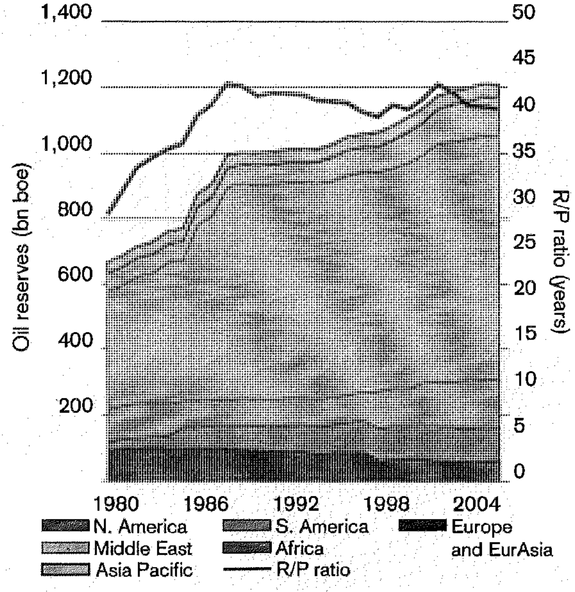
Source: Rio Tinto, ICSG

More importantly, supplies of existing assets are stretched

Global spare oil capacity



Global oil reserves and R/P



Source: Credit Suisse research

CREDIT SUISSE

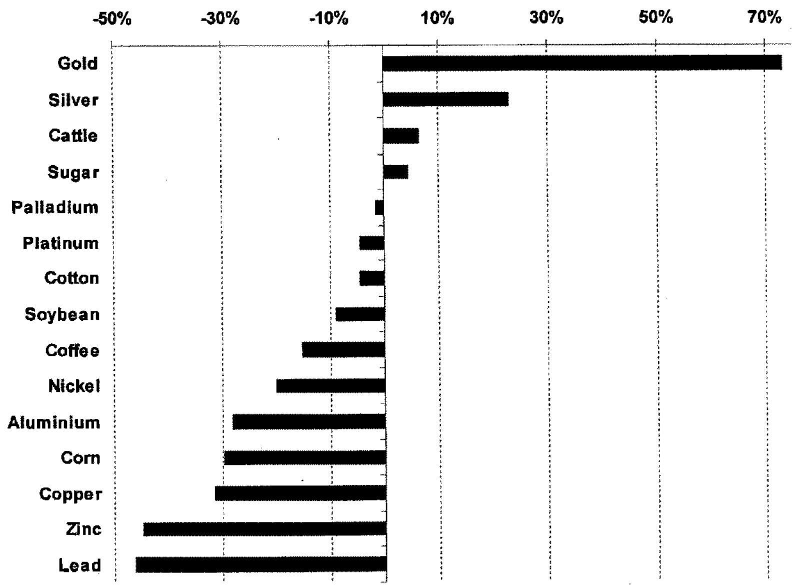
And global inventory levels are low in many commodities

Stocks-to-consumption are significantly lower than their historic averages...

i.e. higher prices are justified by the tightening in supply

The shift is most prominent for base metals and agriculture, driven by the huge increase in consumption in emerging markets which has outpaced production

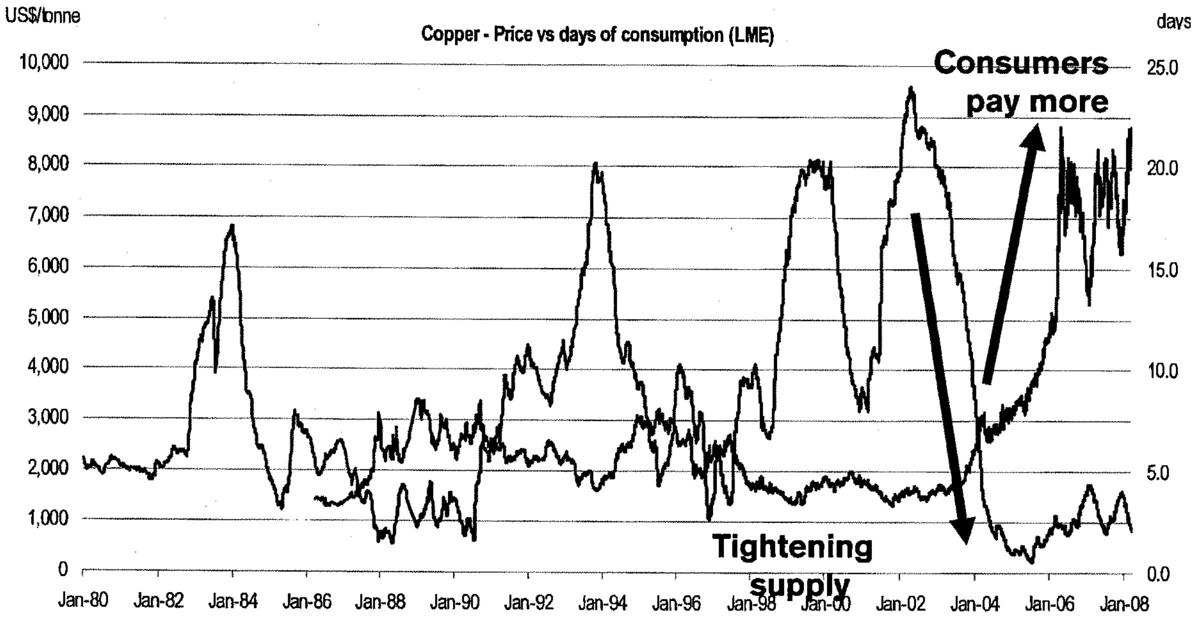
Change in current stocks versus historic averages



Sources: Bloomberg, Credit Suisse

CREDIT SUISSE

For example – Copper…



Copper - Price vs days of consumption (LME)

Consumers pay more

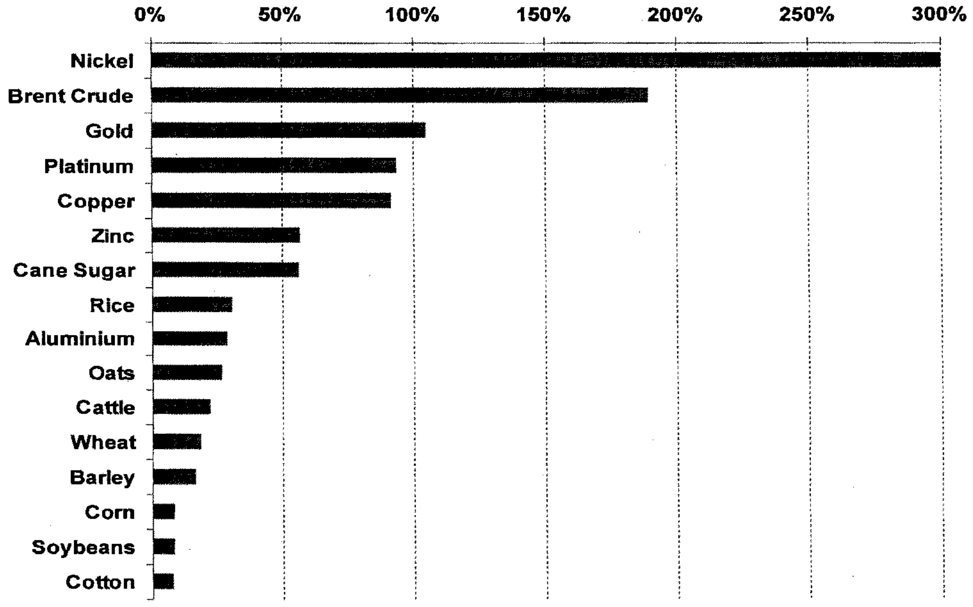
Tightening supply

Sources: Bloomberg, Credit Suisse

CREDIT SUISSE

Prices have also been driven by higher marginal costs

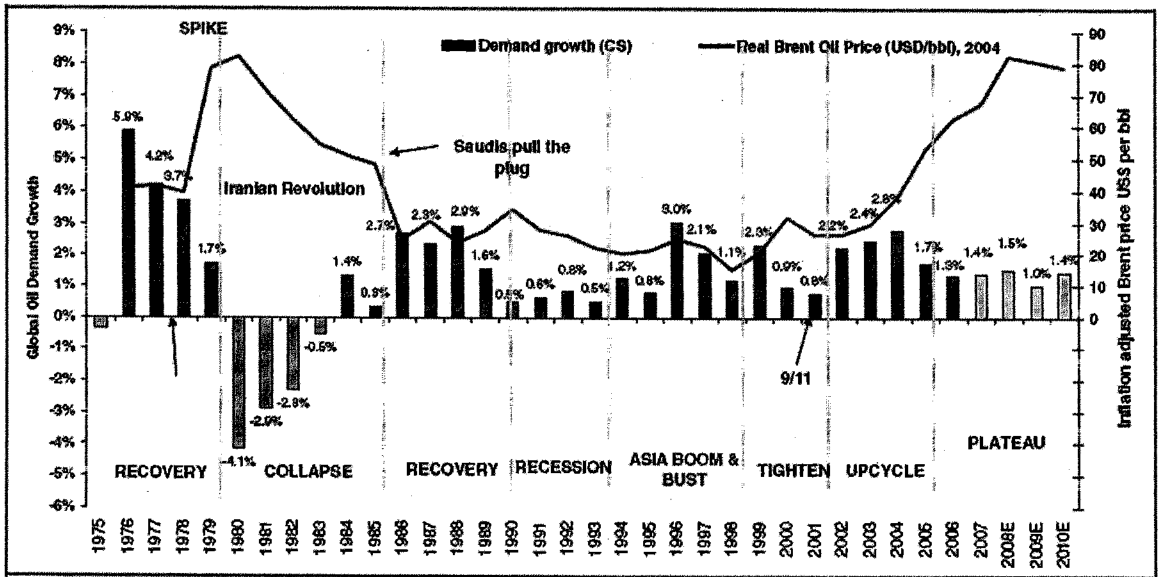
% change in marginal cost of production: Current levels versus historic



Sources: Bloomberg, Credit Suisse

CREDIT SUISSE

Crude oil – trends since the 1970s



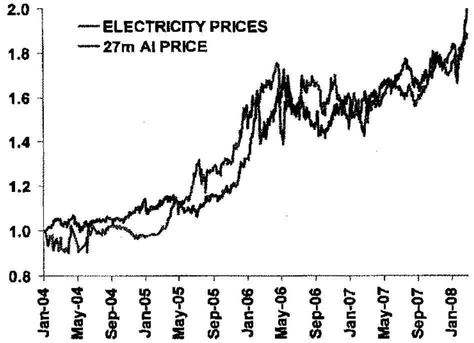
Source: Credit Suisse estimates.

Aluminium – power play

- Powergen capacity is under stress in a number of key producing regions caused by strong demand, lack of investment and high input costs
- Top quartile producers in Europe & China benefit from subsidised power: Europe through long-term fixed price contracts that roll off & China through a fixed tariff
- The situation in China is different this time from 2004. We do not believe there will be the required powergen supply response as margins have collapsed (driven by high coal & oil prices)
- Demand remains underpinned by power/telecom, automotive and construction sectors in EM
- China is needed as a net exporter of primary aluminium to balance the global market. Prices have to shift materially higher in order to ensure further investment in capacity
- Long term prices remain cheap. Dec11 at $3030/t is a PV of $2612. We expect top quartile costs to inflate to $3000/t on a PV basis

Aluminium market supply/demand

(mn MT)	2006	2007	2008	2009
Supply	34.0	38.1	41.5	43.6
Demand	34.4	38.2	41.3	43.4
Balance	-0.4	-0.1	0.2	0.2



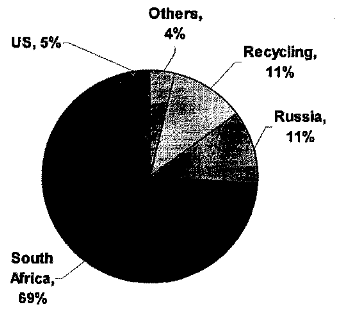
27m Al Prices vs 1st year German Baseload

Sources: Bloomberg, Credit Suisse, UBS

Platinum – fundamentals still strong

- A severe tightening in supply and surge in demand currently provide excellent fundamentals for Platinum
- South Africa accounts for ~70% production, and recent supply disruptions in the country have ranged from industrial action, labour shortages, furnace outages and more recently severe power shortages induced by the main powergen provider Eskom. In some cases production has been halted completely
- Recent long liquidation has been heavy; but technically the picture remains bullish, as prices remain robust above the major support level at $1850
- Significant upside risk will now come from further disruptions are very likely as Eskom have no guarantee of sustaining power production. At present, they have only been able to grant miners 90% of their power requirements, but overall production for future years is a major uncertainty

Global Production source



Platinum market supply/demand

(mn oz)	2006	2007	2008	2009
Supply	7613	7529	7381	7969
Demand	7585	7810	7712	7958
Balance	28	-281	-331	12
NYMEX Inventories	2.063	2.096		

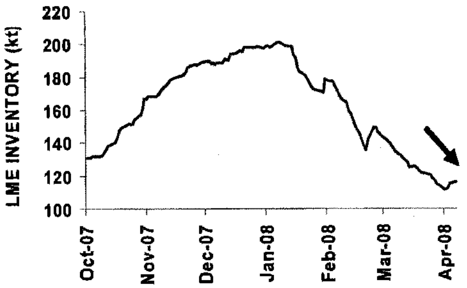
Sources: Bloomberg, Credit Suisse, UBS

Copper – preparing for a storm…

- The main upside risk to the copper market is supply: the market is edging closer toward a deficit, and persistent inventory draws are causing spot supply to tighten by the day. Spot premia continue to rise, with stocks are now down -80kt year-to-date
- The market seems set for a storm, and prices could spike above $12,000 by year-end
- Further supply risks will now come from Chile, where the most immediate threat is power shortage in the North (23% global supply), and could shift the global market into a deficit as soon as this year. The recent explosion in sulfuric acid prices has also added pressure for the smelters, who are edging closer to operating at a loss
- Prices have recently seen severe corrections, but we see support in the near future as risk appetite returns
- Fears over demand are a real issue, but demand growth in emerging markets is sufficient to support the rest of the world. Even if the RoW copper demand grows at 2% and BRIC demand at 9%, the global market would shift into a deficit of -710kt by Dec 2008

Copper market supply/demand

(mn MT)	2006	2007	2008	2009
Supply	17.2	18.0	19.1	19.9
Demand	17.5	18.1	18.8	19.9
Balance	-0.3	-0.1	0.3	0.0



Sources: Bloomberg, Credit Suisse, UBS

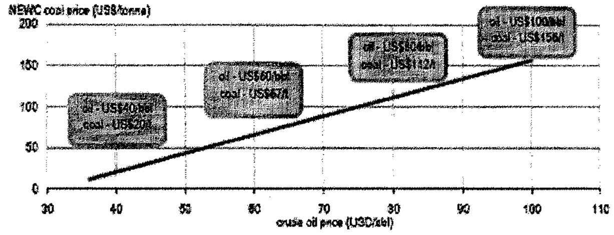
Coal – bullish on global power needs

- Coal is the cheapest source of energy ->>
- Powergen demand for coal continues to grow, particularly in emerging markets – in particular India and China (which is expected to be net coal importer in 08)
- Seaborne supply is becoming constrained by infrastructure issues (Australia, China, S. Africa, Indonesia) and growing domestic consumption (S. Africa, China, Russia)
- Stock levels are at historical lows in certain key countries (i.e. Germany, Japan, India)
- Pricing power has moved from EU to Asia

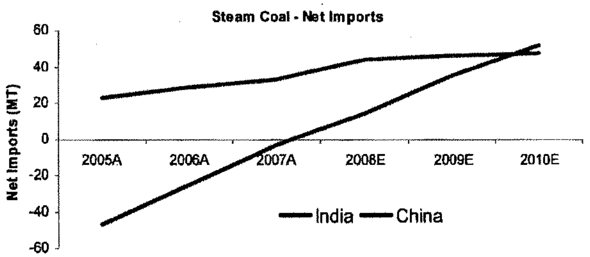
Seaborne Thermal Coal market supply/demand

(mn MT)	2006	2007	2008	2009
Supply	631	658	691	734
Demand	642	670	713	750
Balance	-11	-12	-22	-16

Figure 1: Coal and oil price parity



Source: Company data, Credit Suisse estimates



We are particularly positive on steam coal over the next 12–18 months

Sources: Bloomberg, Credit Suisse

Corn

Acreage Outlook:

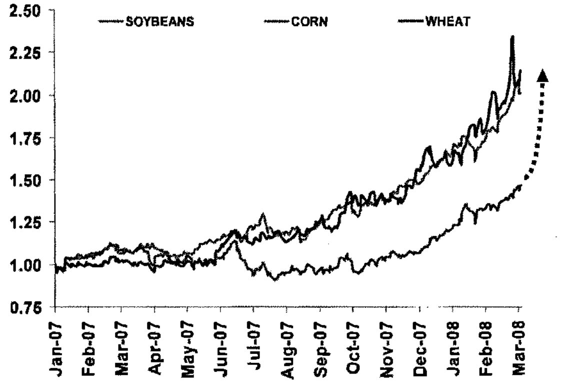
- Corn planted acreage down 8% from 2007 to 86.0m acres. 2007-08 US Corn Carryout expected at 1250-1275m bu vs current estimate of 1438m bu (March USDA Report). Farmers expected to plant less corn due to high input costs for corn crop rotation considerations
- Prices expected to remain strong due to continued expansion in ethanol production support prices

Weather risk:

- Acreage switch from soybeans to corn will only occur if producers are able to plant corn in a timely manner. Current wet weather will severely delay planting in the Cornbelt and northern Delta.
- Wet weather will also lead to loss in yield

Conclusion:

- Prices should rally higher to levels to reduce corn usage or to buy additional acreage from soybeans



USDA Corn Supply/Demand Balance

(mln bushels)	05/06	06/07	07/08	08/09
Sep 1 stocks	2114	1967	1304	1438
Total Supply	13237	12514	14393	13644
Total Usage	11270	11210	12955	13020
Ending Stocks	1967	1304	1438	624

Sources: Bloomberg, Credit Suisse, USDA

Basket Idea

All ideas are EURO denominated, in EMTN format, and are based on an equally-weighted basket of platinum, coal, copper, corn, and aluminium

Non-principal Protected

1. 18-months Outperformance Note
    - a) 130% participation in the upside of the basket. If, however, any of the underlyings are below 65% of their initial level at maturity, Client is also short the downside of the basket
2. 3-year Outperformance Note
    - a) 180% participation in the upside of the basket. If, however, any of the underlyings are below 65% of their initial level at maturity, Client is also short the downside of the basket

Principal Protected

1. 18-months Staircase Note

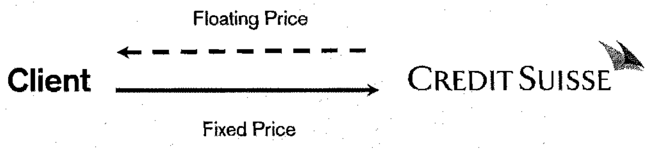
    Investor receives one of the following payouts
    - a) If all underlyings are at or above their initial level at maturity, Coupon [flat] = 12%
    - b) If all underlyings are at or above 110% of their initial level at maturity, Coupon [flat] = 24%
    - c) If all underlyings are at or above 120% of their initial level at maturity, Coupon [flat] = 36%
    - d) If all underlyings are at or above 130% of their initial level at maturity, Coupon [flat] = 48%
    - e) Otherwise, Coupon [flat] = 0%
2. 3-year Bull Note
    - a) 75% participation in the upside of the basket
3. 3-year Dynamic Bull Note
    - a) 105% participation in the upside of the basket. If, however, any of the underlyings are below their initial level at maturity, basket participation in the upside is 50%

Cash Settled Swap on Non-Exchange Traded Commodities

- **Benefit from a rise in the price of underlying commodity by entering into a financial swap contract to buy at a fixed level for a certain period in the future**
- **CS can offer the following underlying commodities:**
  Vanadium, Cobalt, Alumina, Ferrochrome, Molybdenum
- **Client enters into an OTC fixed rate swap based on volume, agreed reference, tenor**
  - Client pays Credit Suisse pre-agreed fixed price based on a volume of cobalt over a certain period
  - Credit Suisse pays Client floating price based on a volume of the underlying commodity over the same period
  - Floating (reference) price: monthly average of the price of the underlying in USD
  - Settlement occurs monthly and the swaps are financially settled - there is no physical delivery of the underlying

Underlying	Bloomberg Ticker
Vanadium	MBVAEU80 <INDEX>
Cobalt	MBC0FM.3 <INDEX>
Alumina	MBALUMIN <INDEX>
Ferrochrome	MBCMUS55 <INDEX>
Molybdenum	PFATMOOX <INDEX>

Swap Mechanics



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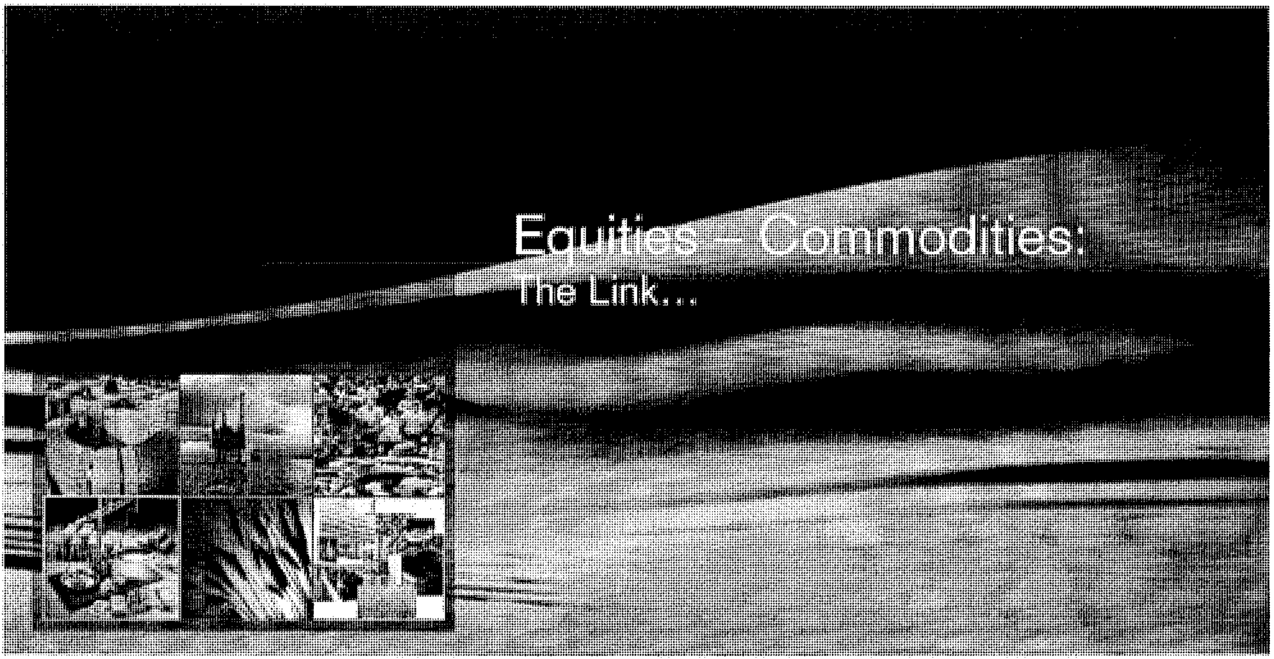


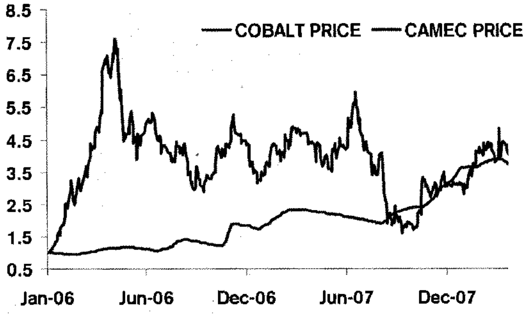
Equities – Commodities:
The Link…

Key Idea 1):

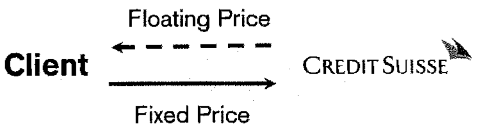
The Cobalt Basket: providing equity clients with commodity exposure

- **AIM**: to combine a basket of pure-play equities with direct exposure to the underlying commodity

- **Example:** **The Cobalt Basket:**
  - 50% CAMEC (African pure-play cobalt miner)
  - 50% Cobalt underlying
  - **Key Advantage** is that basket offers broader diversification than outright equity or outright commodity trade, and potential for higher upside as risk is spread across commodity and equity
  - Provides client with direct exposure to underlying commodity through a **purely** equity-based security



Swap Mechanics



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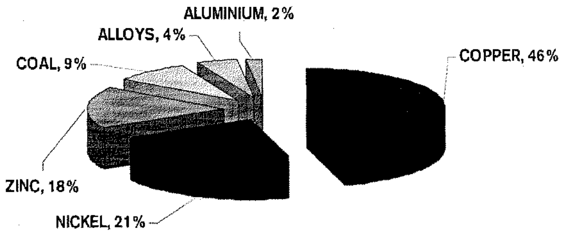
Key Idea 2):
Ever thought of replicating an equity using commodities…?

- **AIM**: to create a commodity-based synthetic equity using earnings splits of the company

XSTRATA 2007 EBITA split



- **Example: XSTRATA** (diversified miner)
- The **advantage** is that the synthetic equity carries no **operational** risk
- Can create products for **hedging** & **speculating**
- **HEDGING:** Client LONG EQUITY (bullish management, bullish prices, bullish production)
- But BEARISH ZINC =>> Short Zinc 3m contracts against long equity

- **SPECULATING:** Client BULLISH on commodity make-up but BEARISH management
- =>> LONG the synthetic basket versus SHORT the equity

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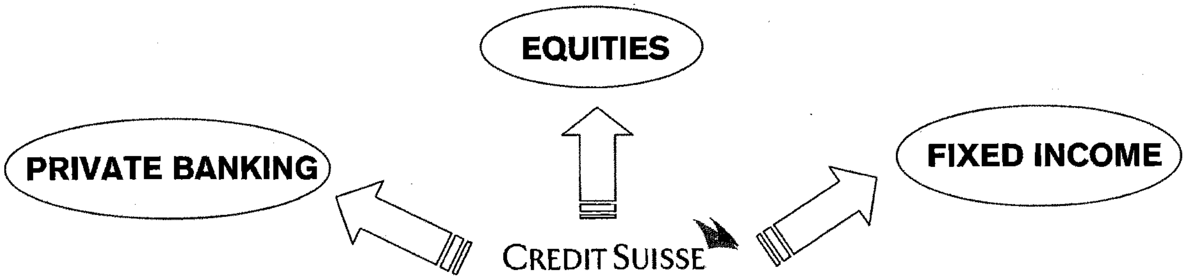
Reaching out to more to a broader client base…



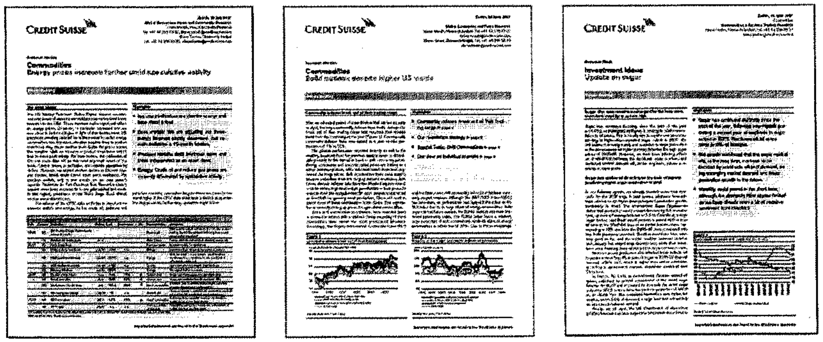
EQUITIES

PRIVATE BANKING

FIXED INCOME

CREDIT SUISSE

COMMODITIES



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Proprietary & Confidential

Trade Idea

Fixed Rate Swap Linked to Iron Ore

23 May 2008

Description

Investors participate in a rise in the price of iron ore by entering into a financial swap contract to buy at a fixed level for a certain period in the future.

- → Client pays/buys Iron Ore at a fixed price based on a notional volume of iron ore for a given period
- → Credit Suisse pays/ Client receives the floating Iron Ore reference price over the same period.

- → The floating reference price: Iron Ore Fines, cfr main China – unweighted arithmetic average of the monthly iron ore prices stated in USD per metric tonne published by:
  - (i) Metal Bulletin (MBFOFO0x index) under the heading World Steel: China: China Import, Brazilian China Port, $/tonne, iron ore fines; and
  - (ii) Steel Business Briefing (SBBSC10 index) under the heading "Steel Prices: Steel Raw Materials Prices: China import: Indian Iron Ore 63.5% Fe dry – CFR N.China port $/t"

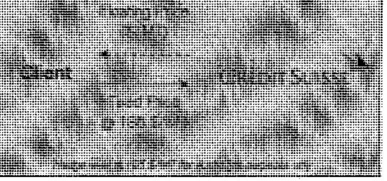
(Bloomberg ticker "MBFOFO01 <INDEX> and SBBSC10 <INDEX>")

- → Settlement occurs monthly and the swaps are financially settled i.e. there is no physical delivery of iron ore, just a net payment of cash (i.e. the difference between the fixed and floating price).
- → Minimum size 5,000MT per transaction, at current price $165/MT -- $825k notional

Indicative Pricing

Period	Fixed Price
Oct-Dec08	$180.00/t
Jan-Mar09	$175.00/t
Apr-Jun09	$172.50/t
Jul-Sep09	$162.50/t
Oct-Dec09	[illegible]

Hedge Mechanics



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This material has been prepared by CS based on assumptions and parameters determined by it in good faith The assumptions and parameters used are not the only ones that might reasonably have been selected and therefore no guarantee is given as to the accuracy, completeness or reasonableness of any such quotations, disclosure or analyses A variety of other or additional assumptions or parameters, or other market factors and other considerations, could result in different contemporaneous good faith analyses or assessment of the transaction described above Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Opinions and estimates may be changed without notice The information set forth above has been obtained from or based upon sources believed by CS to be reliable, but CS does not represent or warrant its accuracy or completeness This material does not purport to contain all of the information that an interested party may desire In all cases, interested parties should conduct their own investigation and analysis of the transaction(s) described in these materials and of the data set forth in them. Each person receiving these materials should make an independent assessment of the merits of pursuing a transaction described in these materials and should consult their own professional advisors.Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct its own investigation and analysis of the product and consult with its own professional advisers as to the risks involved in making such a purchase.

CREDIT SUISSE

CREDIT SUISSE INTERNATIONAL

One Cabot Square
London E14 4QJ

Telephone +44 20 7888 8888
www.credit-suisse.com

07 January 2008

External ID: [ ]

Dear Sir/Madam

The purpose of this letter agreement (this "Confirmation") is to confirm the terms and conditions of each Transaction entered into between CSIN and the respective Counterparty on the Trade Date specified below (each a "Transaction"). This Confirmation constitutes a "Confirmation" as referred to in the Agreements specified below.

In this Confirmation "CSIN" means Credit Suisse International and "Counterparty" means BHP Billiton.

1. The definitions and provisions contained in the 2005 ISDA Commodity Definitions (the "Commodity Definitions") (as published by the International Swaps and Derivatives Association, Inc) are incorporated into this Confirmation. In the event of any inconsistency between the definitions and provisions and this Confirmation, this Confirmation will govern.

   In respect of each Counterparty, this Confirmation supplements, forms part of, and is subject to, the 1992 ISDA Master Agreement dated as of 17 November 2006 as amended and supplemented from time to time (the "Agreement"), between CSIN and such Counterparty. All provisions contained in the Agreement govern this Confirmation except as expressly modified below.

2. The terms of the particular Transaction to which this Confirmation relates are as follows:

Trade Date:	07 January 2008
Effective Date:	01 October 2008
Termination Date:	31 December 2008
Commodity:	Steel China Iron Ore Fines cfr main China Port
Total Notional Quantity:	105,000 metric tonnes
Notional Quantity per Calculation Period:	35,000 metric tonnes

Calculation Period(s):	3 monthly periods, from and including the Effective Date, to and including the Termination Date.
Payment Date(s):	Five (5) Business Days, following the last Business Day in each Calculation Period.
Fixed Amount Details:	
Fixed Price Payer:	
Fixed Price:	$150 per metric tonne
Floating Amount Details:	
Floating Price Payer:	
Commodity Reference Price:	The price for a Pricing Date will be that day's Specified Price per metric tonne of Iron Ore Fines, cfr main China Port, stated in U.S. Dollars, published under the heading *"Steel China Iron Ore Fines cfr main China Port, $/tonne"* in the issue of Metal Bulletin (MBFOFO01 Index) that reports prices effective on the Pricing Date.
Specified Price:	Average of High Price and Low Price
Pricing Date(s):	Every Friday in the Calculation Period. If any Pricing Date is not a Commodity Business Day (as defined in Section 1.4(b) of the Commodity Definitions), such Pricing Date(s) shall be disregarded for the purposes of determining the Floating Price
Method of Averaging:	Unweighted arithmetic mean
Business Day(s):	New York, London
Calculation Agent:	CSIN
Account Details:	
Payments to CSIN:	As advised separately in writing
Payments to Counterparty:	As advised separately in writing

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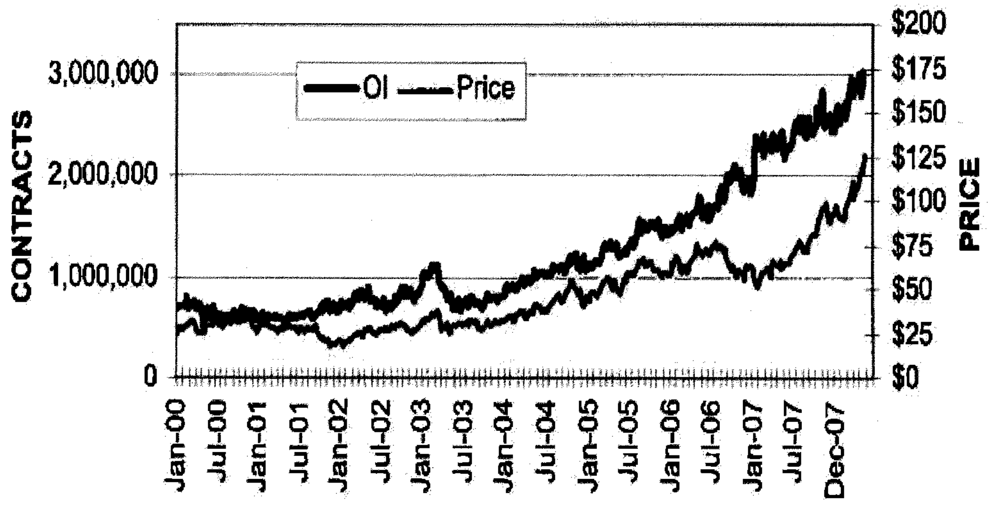
CSIN is authorised and regulated by The Financial Services Authority and has entered into this transaction as principal. The time at which the above transaction was executed will be notified to Counterparty on request.

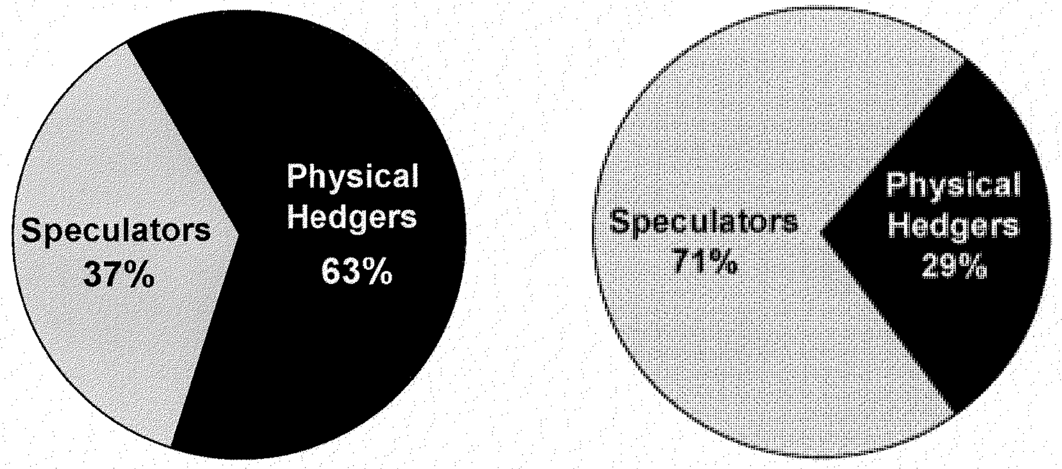
NYMEX TOTAL CRUDE OIL OPEN INTEREST
Vs. Nearby NYMEX Futures



SOURCES: CFTC FUTURES AND OPTIONS COMBINED, CQG

Care of Citi Futures Perspective

Speculators Now Dominate WTI Crude Oil Trading on NYMEX

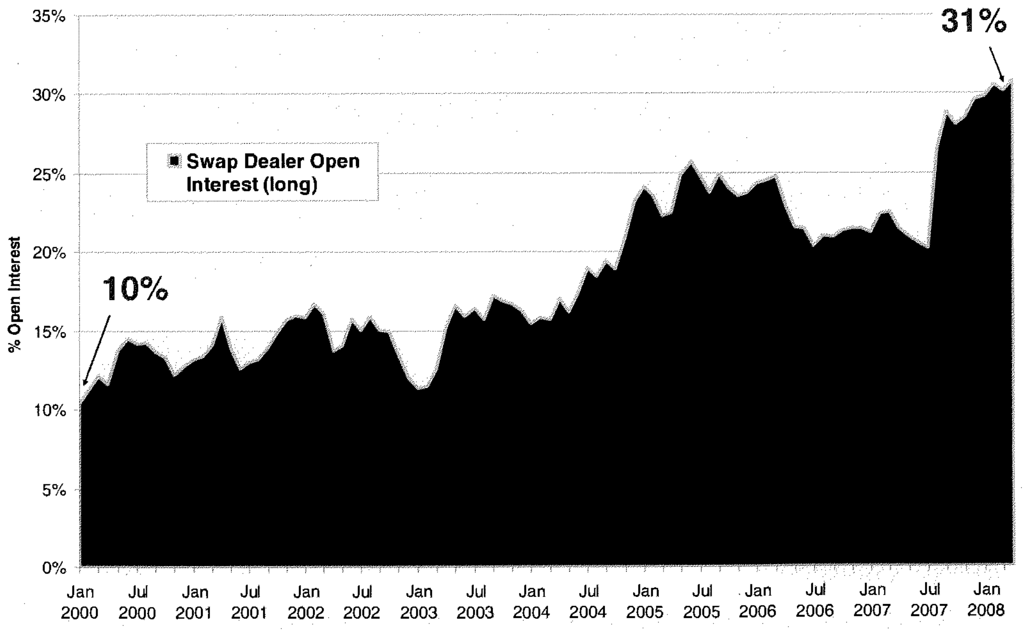


January 2000 **April 2008**

*WTI average open interest, long positions
Source: Estimates based on CFTC Data, Office of the Chief Economist

Swap Dealers Growth Triples in Eight Years

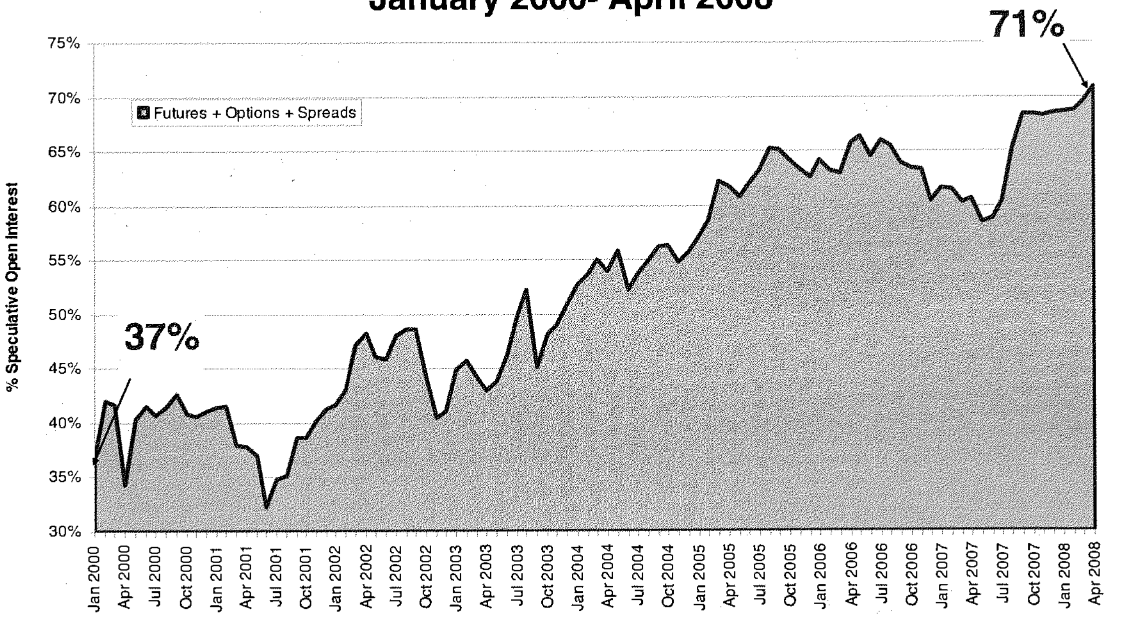
WTI Open Interest on NYMEX (Long)
January 2000 - April 2008



Source: CFTC Data, Office of the Chief Economist

The Rise of Speculation as a Percentage of Open Interest on the NYMEX WTI Contract

January 2000- April 2008

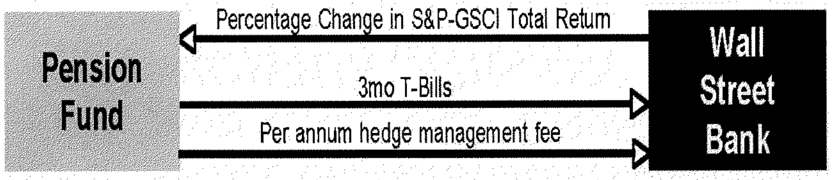


Source: Estimate of share of speculative open interest based on CFTC Data, Office of the Chief

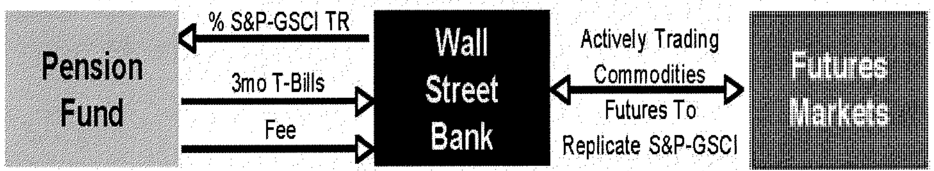
*Long Positions Only

Diagram of a Commodity Index Swap

Swap Diagram Example


Pension Fund
Percentage Change in S&P-GSCI Total Return
3mo T-Bills
Per annum hedge management fee
Wall Street Bank

Swap Diagram Example *(continued)*



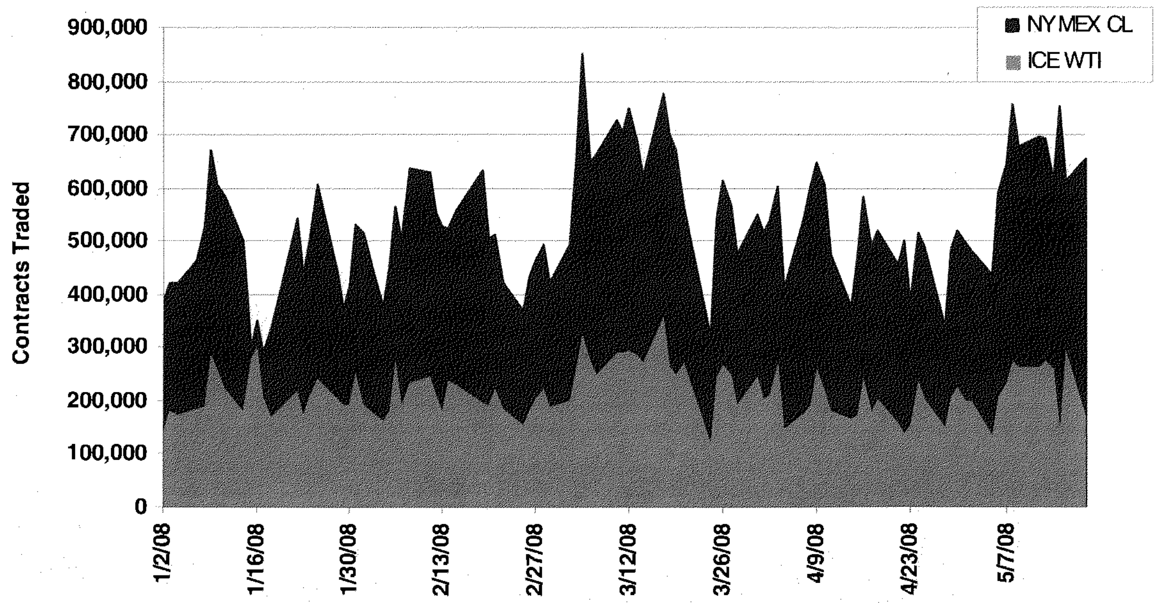
Source: Michael Masters

ICE WTI vs. NYMEX WTI

Total Contracts Traded

January 2, 2008- May 19, 2008

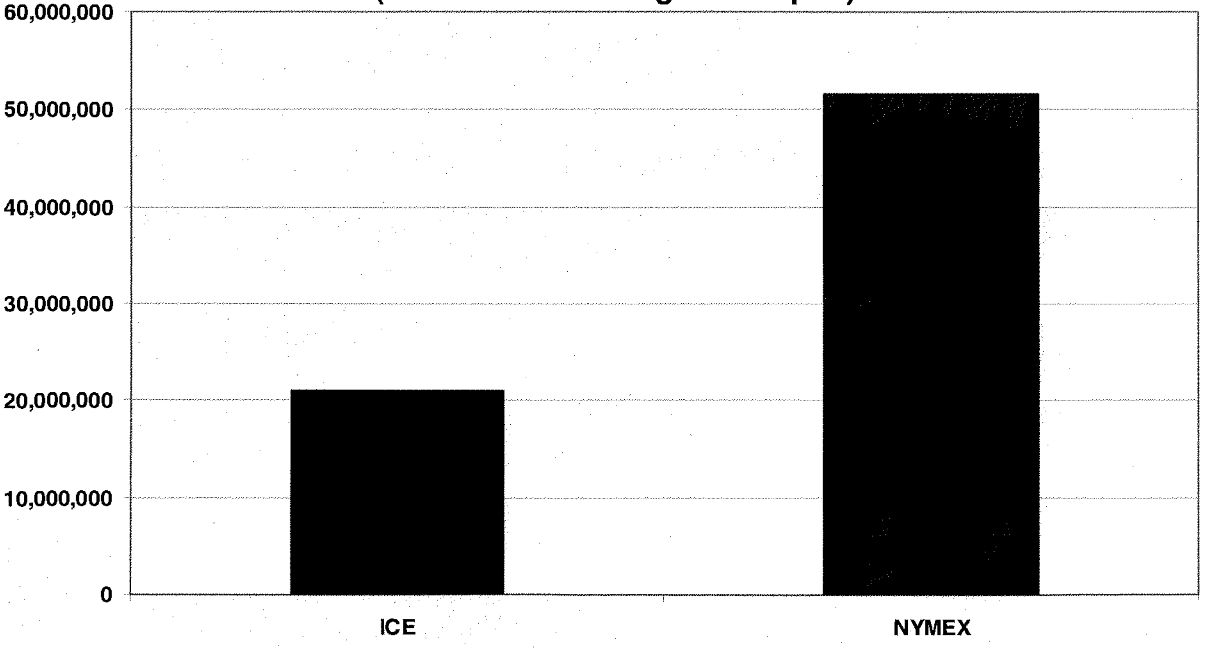
(When both exchanges open)



Source: CFTC Data

ICE WTI vs. NYMEX WTI

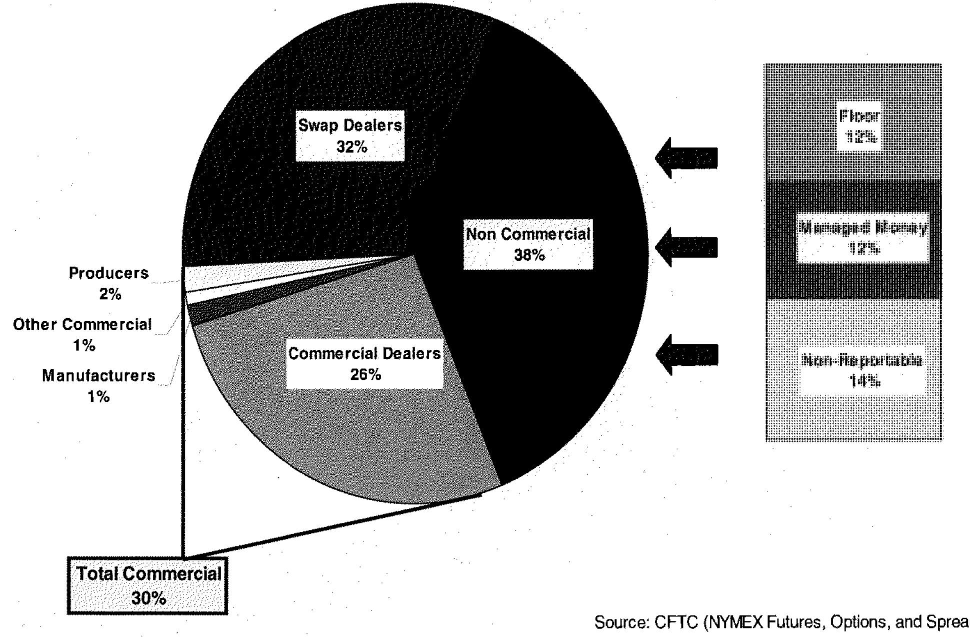
Total Contracts Traded
January 2, 2008 – May 19, 2008
(when both exchanges are open)



Source: CFTC Data

WTI Average Open Interest for April 2008 on NYMEX

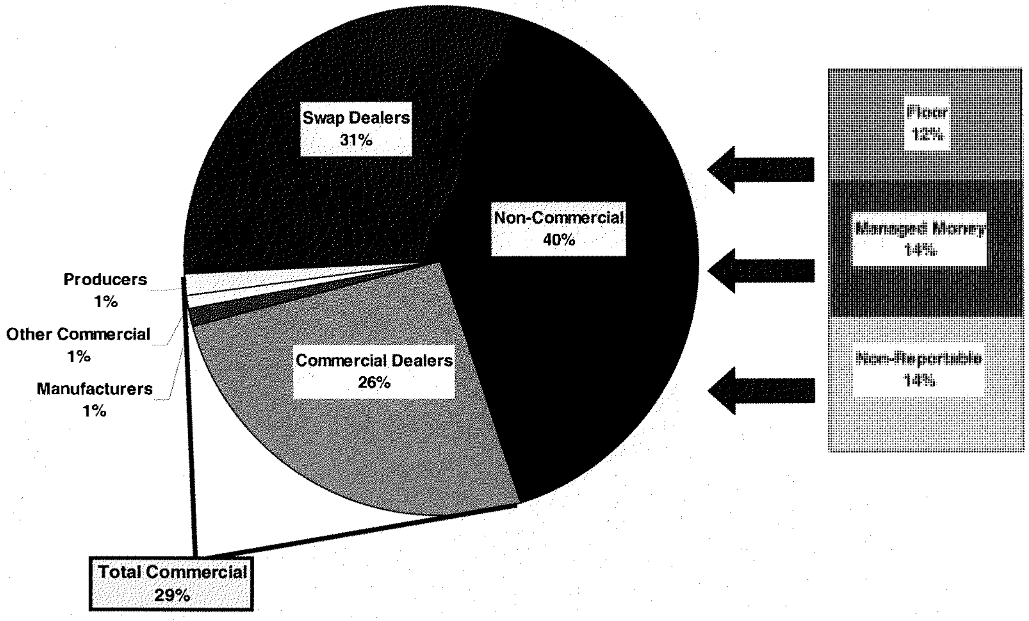
Long & Short Positions



Source: CFTC (NYMEX Futures, Options, and Spreads Data)

WTI Average Open Interest for April 2008 on NYMEX

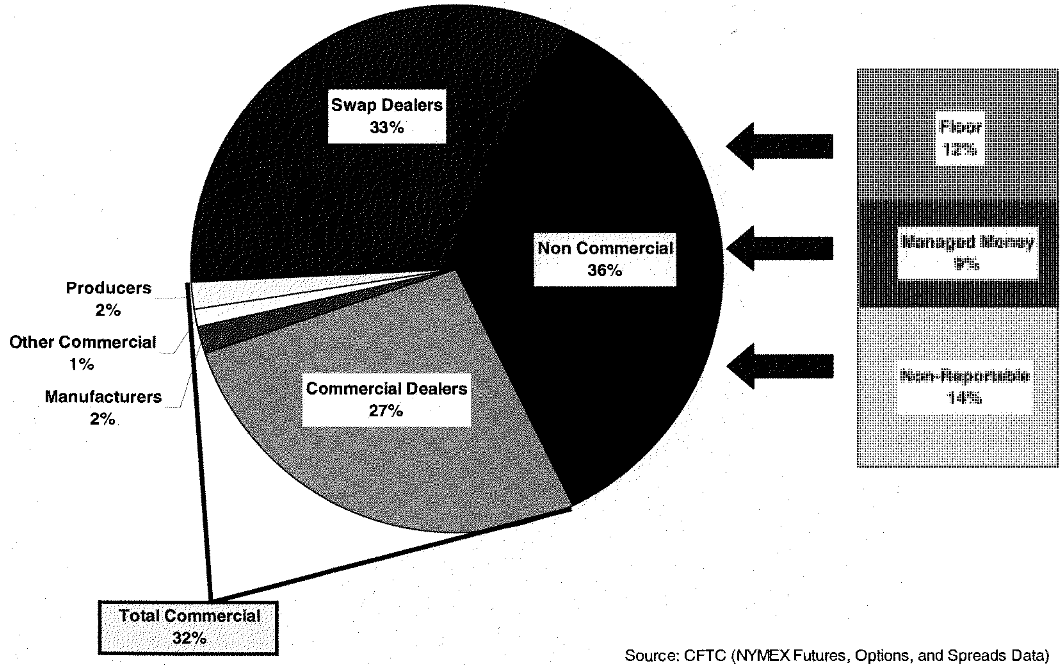
Long Positions



Source: CFTC (NYMEX Futures, Options, and Spreads Data)

WTI Average Open Interest for April 2008 on NYMEX

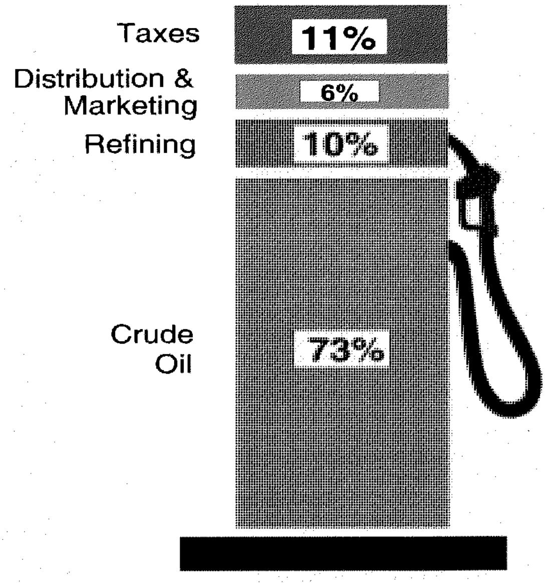
Short Positions



Source: CFTC (NYMEX Futures, Options, and Spreads Data)

What We Pay for at the Pump for a Gallon of Regular Gasoline?

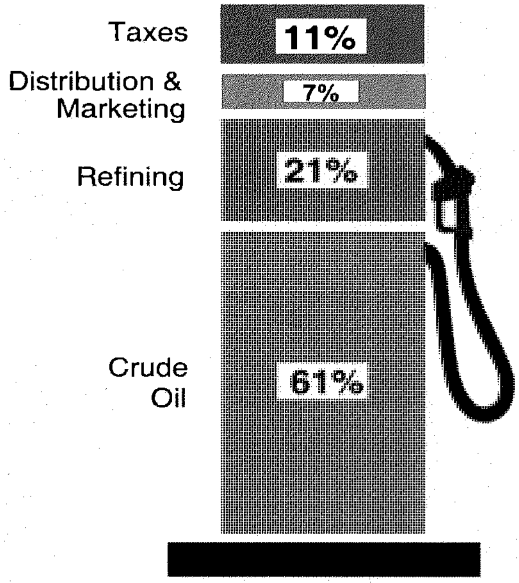
April 2008
Retail Price: $3.46/gallon



Source: Energy Information Administration

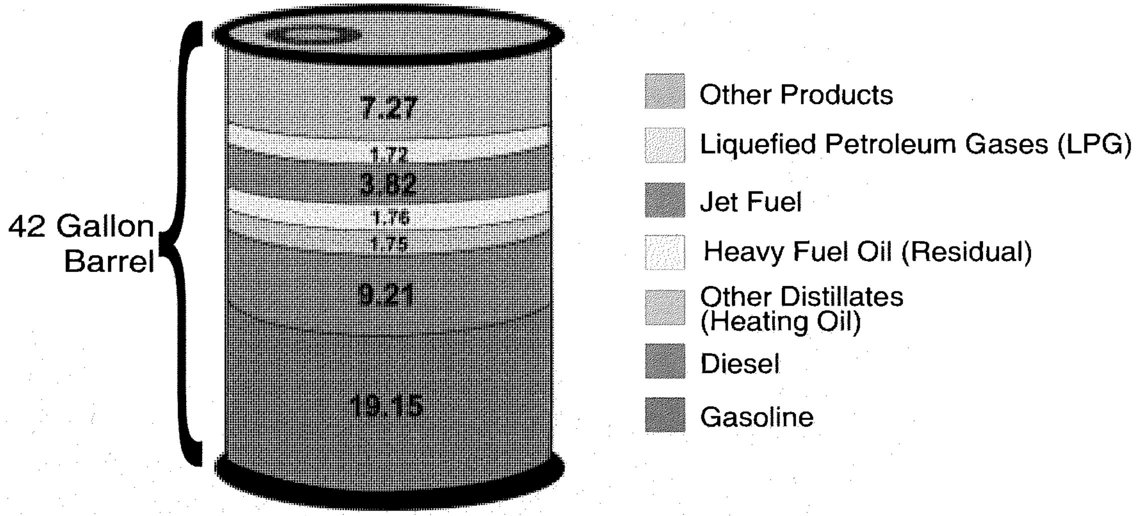
What We Pay for at the Pump for a Gallon of Diesel

April 2008
Retail Price: $4.08/gallon



Source: Energy Information Administration

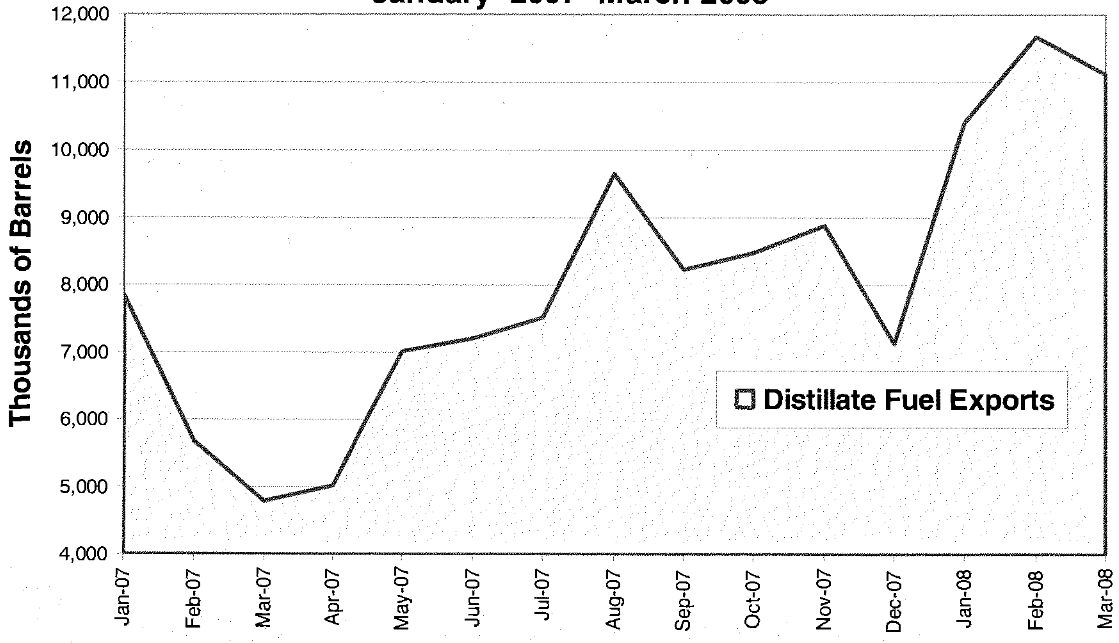
Products Made From A Barrel of Crude Oil
(Unit of Measure: Gallons)



Source: Energy Information Administration
(The total is greater than 42 gallons due to processing gain.)

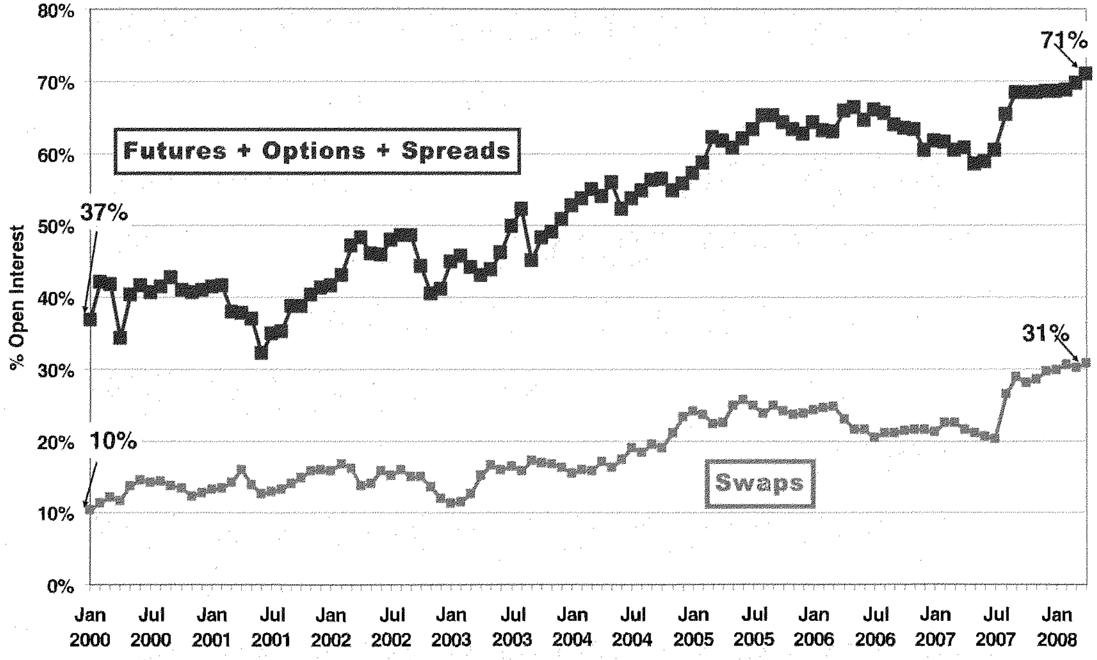
Distillate Fuel Exports

January 2007- March 2008



Source: EIA

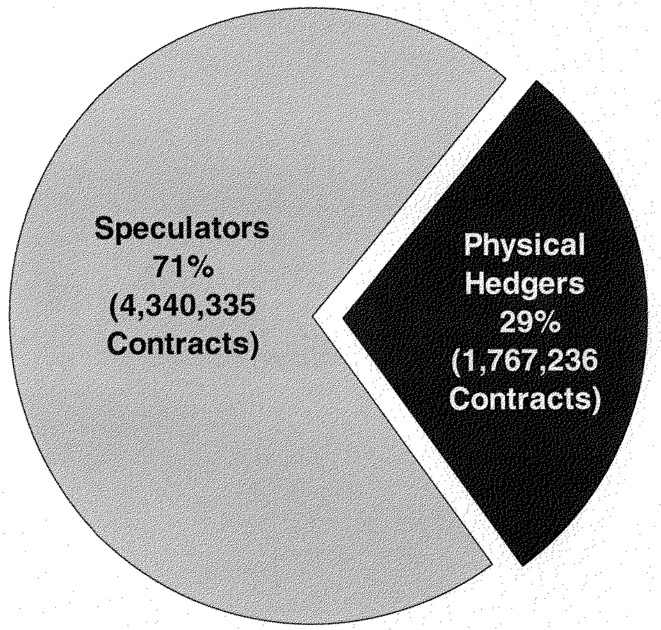
The Rise of Speculation
WTI Open Interest on NYMEX (Long)
January 2000 - April 2008



Source: CFTC Data, Office of the Chief Economist

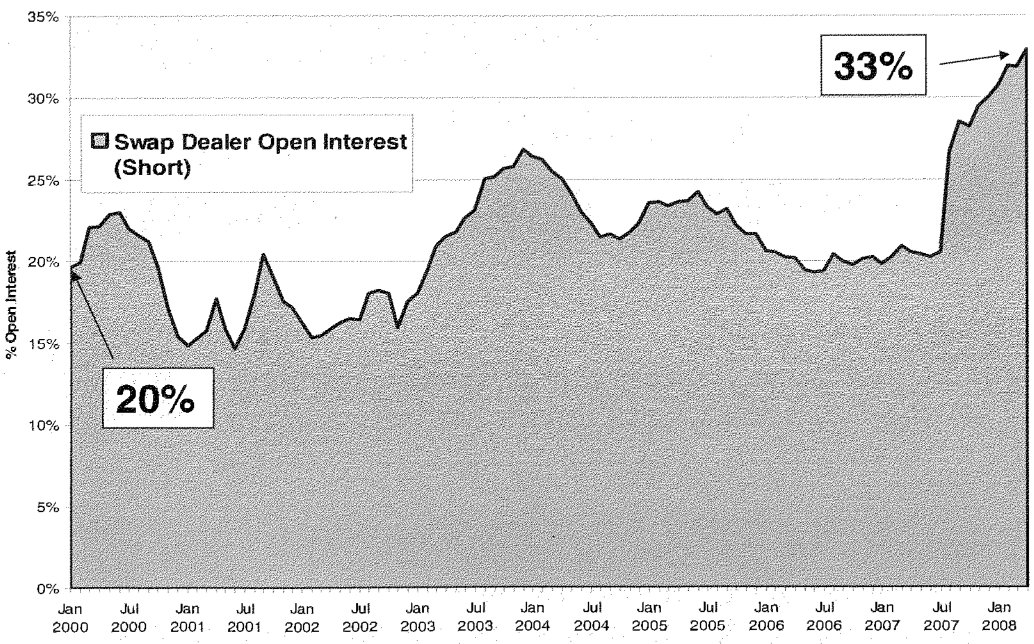
Average Open Interest for WTI Contract

(All months During April 2008)
NYMEX and ICE Futures Europe



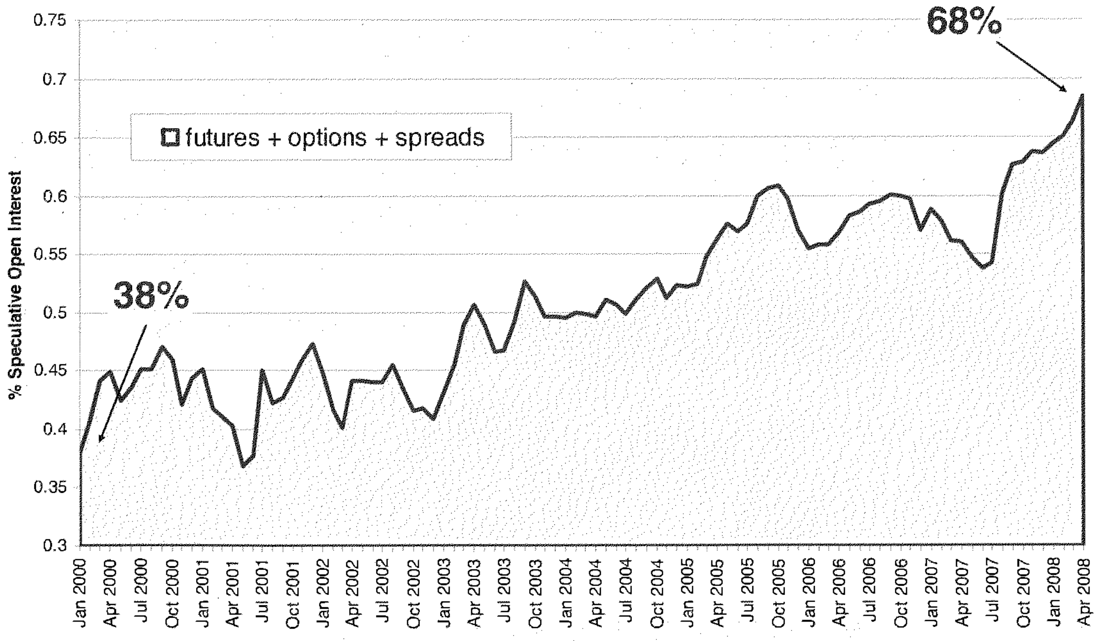
Source: Estimates from CFTC (NYMEX Futures, Options, and Spreads Data);
ICE Futures www.theice.com
*Long and short positions

Swap Dealer Growth
WTI Open Interest on NYMEX (Short Positions)
January 2000- April 2008



Source: CFTC Data, Office of the Chief Economist

The Rise of Speculation as a Percentage of Open Interest on the NYMEX WTI Contract January 2000- April 2008

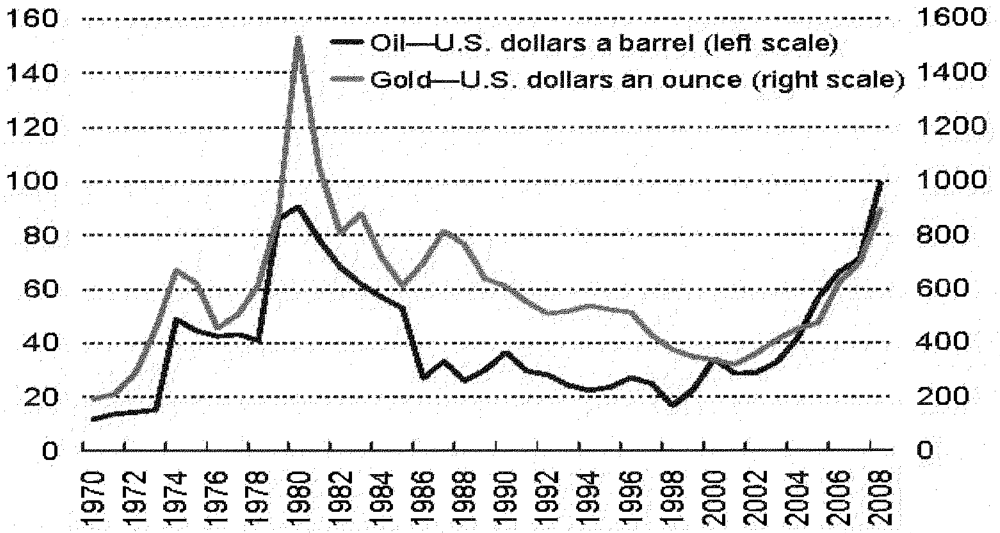


Source: CFTC Data, Office of the Chief Economist

Short Positions Only

Figure B7.2. Oil and Gold Prices Deflated by U.S. CPI

(Base year = 2007)



Source: IMF, *World Economic Outlook*.

CFTC Fact Sheet

CLAIM

Speculative traders' interest in crude oil now account for roughly 70% of all trading in West Texas Intermediate crude on the New York Mercantile Exchange, compared with 37% in 2000.

FACTS

- The 70% figure includes swaps dealers in the speculative category and includes the long and short positions of both swaps dealers and speculators without netting the positions.
- It is important to note that much of swaps dealer activity involves commercial hedging and risk management.
- According to CFTC data, swaps dealers as a whole are close to flat in the crude oil markets – meaning they are almost equally long and short in the marketplace. (as seen in Chart 1 and 2 below)
- Traditional speculative positions (in this case, "speculators" minus the swaps dealers positions) include long and short positions – in fact, there are almost as many short speculative positions as there are long positions. (as seen in Chart 3 below)
- Speculative positions have not been increasing during the past year. The net-long positions of non-commercials is currently around 100,000 (as seen in Chart 3), which is the lowest it has been in about a year.
- The CFTC is in the midst of getting more data from swaps dealers to get a better, clearer view of the marketplace – and will report to Congress by Sept 15th further about this activity and its impact on the markets. It is premature to draw conclusions about the impact of swaps dealers before the data is available and analyzed.

Chart 1

NYMEX Crude Oil Futures & Options
Gross Positions of Swap Dealers
June 6, 2006 to June 17, 2008

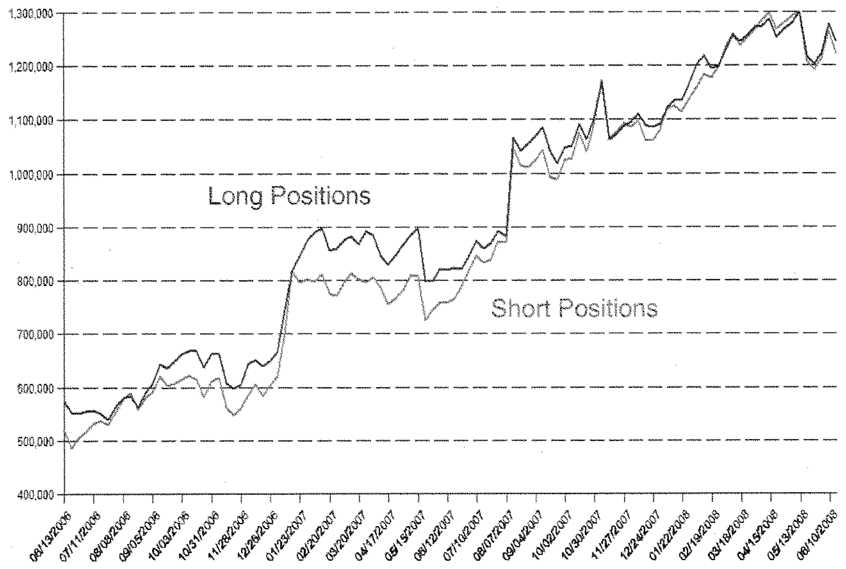


Chart 2

NYMEX Crude Oil Futures & Options
Net Positions of Swap Dealers
June 6, 2006 to June 17, 2008

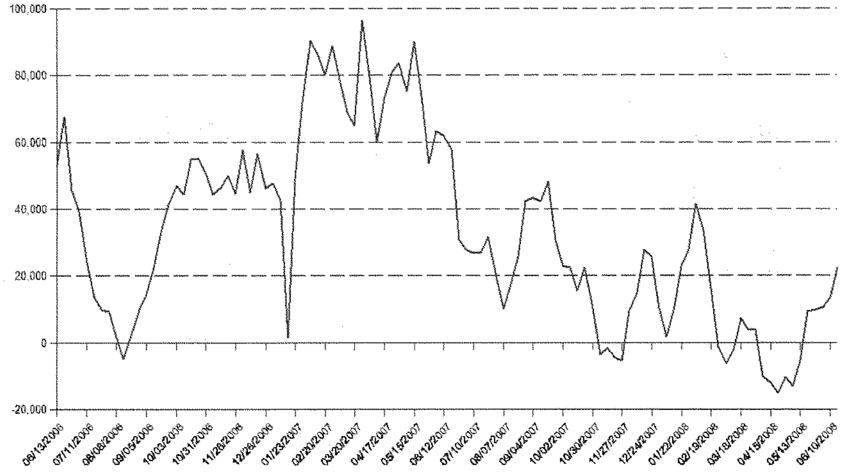
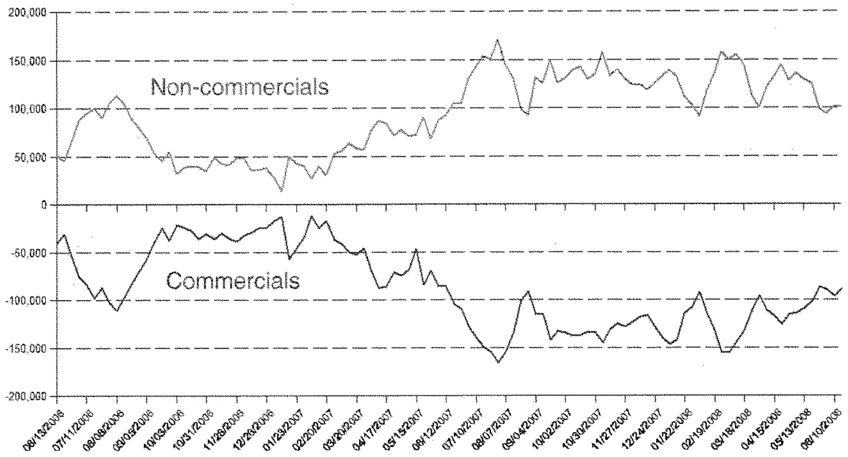


Chart 3

NYMEX Crude Oil Futures & Options
Net positions of Commercials & Non-Commercials
June 6, 2006 to June 17, 2008



Air Transport Association
alpa
ACI North America
Airports Council International
AAAE
American Association of Airport Executives
ABC
Associated Builders and Contractors, Inc.
ASTA
ATA
BTC
CEA
Consumer Energy Alliance
CFA
Industrial Energy Consumers of America
International Brotherhood of Teamsters
ITSA
International Travel Services Association
NACA
National Farmers Union
nefi
PMAA
The Petroleum Marketers Association of America
RAA

June 11, 2008

Majority Leader Harry Reid
Minority Leader Mitch McConnell
Speaker Nancy Pelosi
Minority Leader John Boehner

Dear Leader Reid, Leader McConnell, Speaker Pelosi, and Leader Boehner:

Record-high, irrational oil prices are smothering the American economy. While we all recognize that a commonsense, long-term energy policy is desperately needed in this country, given the grim statistics that are getting worse every day, Congress must find bipartisan, near-term solutions. Absent an immediate reform in the widely-speculative energy commodity futures markets, oil prices worldwide will continue to surge, clamping down even harder on the U.S. economy.

In May, unemployment climbed again to 5.5%, the highest one-month spike in 22 years; many thousands more employees were laid off; commercial air service to 100 cities was completely eliminated or will be by year-end; businesses closed because they cannot begin to raise prices of goods enough to recoup surging fuel costs; and families chose between filling up their gas tanks or grocery carts.

Leading energy experts across the country agree that recent, unprecedented jumps in crude oil prices are due, in large measure, to rampant speculation in the energy commodities markets. Just last Friday, when oil spiked by $10 per barrel, speculators traded 22 barrels of "paper oil" for every single physical barrel of oil consumed. Sophisticated "paper" speculators who never intend to use the oil are driving up costs for consumers and making huge profits with little to no risk. Having abandoned the stock market, these aggressive traders are manipulating the energy market to their sole advantage.

This country needs a *fair, transparent and balanced energy commodities market*, not one that is skewed to benefit speculators and institutional investors. We urge immediate action, through either the Commodity Futures Trading Commission or Congress, to ensure meaningful reforms are put in place to restore market integrity. Although specific measures must be carefully drafted to avoid unintended consequences, priority steps include (1) fully closing all loopholes, including the "Enron Loophole" and "Swaps Loophole, " that allow institutional investors to avoid limits on the size of their investments; (2) ensuring all energy traders, including those trading on foreign boards of trade, are subject to the limits imposed on U.S. exchanges; and (3) increasing margin requirements and imposing appropriate disclosure/financial requirements on institutional investors.

The undersigned strongly urge Congress to take meaningful steps as soon as possible to address the distorted energy commodities market and stop any further decline in the U.S. economy. We offer our full support for your efforts.

Air Line Pilots Association
Airports Council International
Air Transport Association
American Association of Airport Executives
American Society of Travel Agents
American Trucking Associations
Associated Builders and Contractors
Business Travel Coalition
Cargo Airline Association
Consumer Energy Alliance
Consumer Federation of America
Industrial Energy Consumers of America
International Brotherhood of Teamsters
Interactive Travel Services Association
National Air Carriers Association
National Farmers Union
New England Fuel Institute
Petroleum Marketers Association of America
Regional Airline Association

ACAA
alpa
ACI North America Airports Council International
Air Transport Association
AIR TRAVELERS ASSOCIATION
AAAE American Association of Airport Executives
ASTA
APFA
Industrial Energy Consumers of America
NATCA
NBTA National Business Travel Association Connecting the Business Travel World
National Farmers Union
RAA

June 20, 2008

The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigation
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Ten days ago, a broad coalition of consumer, labor, and business organizations joined to advocate immediate reforms in the widely-speculative energy commodity futures markets. While a long-term, rational energy policy including increased supply is our ultimate goal, bipartisan, near-term solutions to the market frenzy are absolutely critical. Experts agree that today's surging oil prices are beyond those warranted by supply-demand fundamentals and are due, in large part, to rampant speculation.

In early June, speculators traded more than 1.9 billion barrels of crude oil – 22 times the size of the physical oil market, including $150 billion traded on the New York Mercantile Exchange alone. Sophisticated "paper" speculators who never intend to use oil are driving up costs for consumers and making huge profits with little to no risk.

With your leadership, we see an end to the current unwarranted escalation in oil prices. All coalition members are pleased to endorse and to pledge our full support for the prompt enactment of your proposed "Prevent Unfair Manipulation of Prices Act of 2008." The PUMP Act will apply a much needed brake on rampant energy commodity speculation to drive down unprecedented, surging oil prices crippling the economy.

The heart of PUMP is Section 2 that extends CFTC jurisdiction over energy commodities that now enjoy a host of trading loopholes. Specifically, we applaud your bill's focus on opening up the market to greater transparency and fairness to level the playing field for all traders. We fully support the bill, including strong provisions that:

- bring over-the counter energy commodities within CFTC's oversight responsibilities;
- close the "swaps loophole" by extending CFTC regulatory authority to swaps involving energy transactions, another important step towards needed transparency;
- extend CFTC regulatory authority to energy transactions on foreign boards of trade that provide for delivery points in the United States, a common sense measure as other products delivered in the United States are subject to the full panoply of United States regulation, save energy commodities; and
- require CFTC to set aggregate position limits on energy contracts for a trader over all markets, ensuring that traders do not corner markets by amassing huge positions and playing one exchange off another.

The undersigned strongly endorse the PUMP Act, urge Congress to act promptly, and pledge our full support for your efforts.

Air Carriers Association of America
Air Line Pilots Association
Airports Council International
Air Transport Association
Air Travelers Association
American Association of Airport Executives
American Society of Travel Agents
Association of Professional Flight Attendants
Industrial Energy Consumers of America
International Association of Machinists
International Brotherhood of Teamsters
National Air Traffic Controllers Association
National Business Travel Association
National Farmers Union
Regional Airline Association

Order Code RL30434

Report for Congress
Received through the CRS Web

The Commodity Futures Modernization Act of 2000: Derivatives Regulation Reconsidered

Updated January 29, 2003

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The Commodity Futures Modernization Act of 2000: Derivatives Regulation Reconsidered

Summary

In December 2000, Congress passed the Commodity Futures Modernization Act, the most significant amendments to the Commodity Exchange Act in 25 years. This report describes the historical market developments and the major issues that shaped consideration of that legislation.

In 1974, Congress created a new independent agency, the Commodity Futures Trading Commission (CFTC), to oversee trading in derivative financial instruments. Derivatives – which are used to avoid risk of price changes in some underlying commodity or financial variable *or* in search of speculative profits from the same price changes – were on the verge of a major expansion: from contracts based on farm commodities and minerals to "financial futures" based on bonds, currencies, and interest rates. The Commodity Exchange Act (CEA) amendments in 1974 gave the CFTC exclusive jurisdiction (with some exceptions) over derivatives regardless of the nature of the underlying commodity or interest.

During the 1980s, however, a new derivatives market grew up, where neither the CFTC nor any other agency exercised comprehensive oversight. Derivatives can now be divided into exchange-traded (CFTC-regulated) instruments and over-the-counter (OTC) instruments. The two types of instruments serve the same economic functions and are often in direct competition. However, the existence of two markets, where the 1974 Commodity Exchange Act amendments envisioned a single market regulated by the CFTC, led many to conclude that the CEA was out of date and in need of major revision.

The futures exchanges contended that CEA regulation put them at a competitive disadvantage versus the unregulated OTC market. OTC market participants claimed that the CFTC's exclusive jurisdiction under the CEA created legal risk for them: OTC contracts could possibly have been invalidated by a court finding that they were in fact illegal, off-exchange futures contracts. Both groups viewed the CEA as an impediment to financial innovation and portrayed themselves as vulnerable to foreign competition.

A joint group of U.S. financial regulators recommended in 1999 that the CEA be amended to 1) exclude certain OTC derivatives from the CEA and 2) permit the deregulation of financial futures (except when they are marketed to small investors), on the grounds that these contracts are less susceptible to manipulation than physical commodities. This was the general approach followed by the Congress in enacting the Commodity Futures Modernization Act of 2000.

This report analyzes the transformation of derivatives markets and the legislative response and will not be updated. The legislation passed by the106th Congress, the Commodity Futures Modernization Act of 2000, is described in CRS Report RS20560, *Derivatives Regulation: Legislation in the 106th Congress.*

Contents

Background 1
  Derivative Markets 1
  Development of Derivatives Markets 3
  Pre-2000 Regulation of Derivatives 5

Regulatory Jurisdiction over Derivatives 7
  Regulation of OTC Contracts 7
  Deregulation of the Futures Exchanges 9
    The Issue of Fair Competition 9

Other Regulatory Issues 12
  Single-Stock Futures and the Shad-Johnson Accord 12

Conclusion 13

List of Figures

Figure 1. Futures Contracts Traded on U.S. Exchanges, by Underlying Interest: 1999 4

Figure 2. Notional Value of OTC Swaps versus Exchange-Traded Financial Contracts, 1991-99 5

Figure 3. Futures Contracts Traded: U.S. versus Foreign Exchanges, 1991-99 10

The Commodity Futures Modernization Act of 2000: Derivatives Regulation Reconsidered

This report analyzes the major issues that were involved in the consideration and passage of the Commodity Futures Modernization Act of 2000 (H.R. 5660; P.L. 106-554). The legislation that created the CFTC in 1974[1] contains a sunset provision: the agency must be reauthorized periodically. The CFTC's authorization expired on September 30, 2000. Reauthorization legislation has usually been the vehicle for consideration of regulatory issues related to futures and derivatives markets. The reauthorization legislation considered and passed in 2000 are described in CRS Report RS20560, *Derivatives Regulation: Legislation in the 106th Congress.* This report provides background on the major reauthorization issues.

The 2000 reauthorization process took place as many regulators and market participants were calling for a fundamental reevaluation of the Commodity Exchange Act (CEA), the statutory basis for the CFTC. Basic changes in the CEA and in the regulation of financial derivatives were proposed, and eventually enacted. Markets had changed dramatically since the CFTC was created, and the existing regulatory framework was under challenge from all sides. Some analysts claimed that CFTC-type regulation was unnecessary in most of the markets where it then applied, that it slowed financial innovation, and that it placed the U.S. futures and derivatives industries at a disadvantage relative to their foreign competition (much of which did not exist in 1974). On the other hand, some believed that deregulation (or the growth of unregulated derivatives markets) may pose serious risks to market participants and to the stability of the global financial system.

What is the appropriate framework for the regulation of financial derivatives? Which federal regulator should have jurisdiction over which forms of trading, and how can jurisdictional quarrels among regulators be prevented? To what extent can industry self-regulation be relied upon to maintain fair, stable, and efficient markets? These broad questions, the background against which Congress in 2000 weighed the future of the CFTC, are examined briefly in this report.

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[1] The Commodity Futures Trading Commission Act of 1974, P.L. 93-463.

Background

Derivative Markets

Derivatives are financial instruments or contracts whose value is linked to the price of some underlying commodity or financial variable. There are several forms of derivatives – the best-known variations are futures contracts, options, and swap agreements – but all have this common central feature: two parties promise to make a transaction (or series of transactions) in the future *at a price that is agreed upon today*. It is expected that the underlying price or rate will fluctuate over the life of the contract, but the price specified in the derivative instrument remains fixed. If they succeed in forecasting the direction of prices, derivatives traders will be entitled to buy the underlying commodity for less (or sell for more) than the going market price. For every winner, there is a loser. Here are three examples:

- A trader who expects the February price of corn of $2.20/bushel to rise over the spring and summer may enter into a "long" futures contract, committing himself to buy 5,000 bushels at that price. (A promise to sell is a "short" contract.) If the price rises to $2.30, the contract gains value: the trader can buy 5,000 bushels at $2.20 (thanks to the futures contract), and sell them at the market price of $2.30, making a profit of 10 cents per bushel, or $500, which is credited to the trader's account.[2]

- An option to sell 100 shares of Cisco Systems stock at $120/share[3] has an intrinsic value of $1,000 if the current market price is $110 (100 X the $10 price differential). If the market price rises above $120, the option is "out of the money," and the holder will not exercise it. The difference between options and futures is that the option buyer is not obliged to make the transaction on unfavorable terms if prices fail to move as expected. In exchange for this right, the seller of the option receives a cash premium.

- A financial institution with large amounts of floating-rate debt fears that interest rates are about to rise, which would increase its debt service costs. It enters into an interest rate swap: it agrees to pay its swap dealer a fixed rate of interest on a principal amount equal to its

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[2] Futures contracts are "marked-to-market" daily – losses must be paid up, and gains are credited to the winners' accounts. A trader may take his profits at any time up to the expiration of the contract by entering into an opposite, or offsetting, contract, so that his net obligation to buy and sell the commodity is zero. Holders of physical commodity futures have the option of settling the contract by making (or taking) delivery of the commodity itself at expiration, but only about 0.7% of U.S. futures contracts are settled this way. The rest are settled in cash.

[3] The original version of this report was written in early 2000, when many Internet companies' shares traded at over $100. In early 2003, Cisco trades at under $15/share, making the option described above profitable indeed!

> outstanding debt,[4] and in return will receive a floating-rate payment on the same principal amount. Thus, if interest rates do rise, the swap payments it makes remains constant, while the swap payment it receives rises, allowing it to meet the rising claims of its floating-rate creditors. The swap converts floating-rate to fixed-rate debt.

Thus, the owner of a derivative gains or loses as the underlying price or rate changes, without actually owning the underlying commodity itself. Derivatives allow traders to take a position in markets at a fraction of the cost of buying an equivalent amount of the underlying item. A 5,000-bushel corn futures contract might require an initial cash outlay – called a margin payment – of about $500, even though the total underlying commodity value is $11,000. To buy 100 shares of Cisco (at $110/share) would also cost $11,000, but the premium (price) of the option described above might be less than $1,100.[5] Derivatives speculation is therefore said to be "leveraged," because traders take relatively large positions in markets with relatively little capital outlay. As a result, the effects of changes in the underlying commodity's price are magnified: if Cisco Stock rises by 10%, the option holder doubles his money. Leverage also implies the risk of large, sudden losses.

Derivatives are often described as bets on future price changes. This is not incorrect, but it is incomplete. Derivatives can be used to speculate, but they can also provide protection against the risk of unfavorable turns in prices or interest rates. On the other side of a corn speculator's contract might be a farmer who feared that prices in the fall would be even lower. Taking the short side would allow him to sell at $2.20/bushel, no matter how low the market price went. Similarly, the financial institution in the third example above uses an interest rate swap not to seek trading profits but to protect itself against a rise in interest rates.

Derivatives are used by businesses, units of government, and financial institutions to manage risk. Often, they permit the "unbundling" of risks in ways that give market participants greater control over the risks they assume. For example, the holder of a foreign bond faces two separate risks. That is, the value of the bond will fall if 1) interest rates rise or 2) the currency in which the bond is denominated loses value relative to the holder's domestic currency. Using derivatives, the holder may choose to assume either of these risks or to pass them off to someone else.

In sum, derivatives users can be divided into two groups, who use the markets for opposite purposes. *Speculators* seek to profit by anticipating future price changes, while *hedgers*, whose business generally involves them in the cash market for the underlying item, avoid price risk by transferring it to others (namely, the speculators).

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[4] The principal in an interest rate swap is "notional," or imaginary. It is never actually exchanged, but serves as a reference point to determine the size of the swap payments.

[5] In addition to its intrinsic value (the difference between the market price and the option's exercise, or "strike" price) an option has time value – the probability that its value will increase before expiration.

Development of Derivatives Markets

Derivatives began as an adjunct to agriculture. Producers, distributors, and processors of farm commodities devised futures, options, and forward contracts to protect themselves against rising or falling prices. These markets became the futures exchanges and flourished because of the existence of speculators willing to assume the risks that others wished to avoid. In the 1970s, the Chicago futures exchanges expanded the market dramatically by introducing contracts based on financial instruments: potential derivatives users now included not just producers and commercial users of commodities, but any business whose profits were affected by interest rates or foreign exchange rates. Today, as figure 1 shows, financial futures and currency futures account for about 2/3 of contracts traded on U.S. exchanges.

The success of financial futures attracted competition. In the 1980s, banks and securities firms — those who dealt in the actual stocks, bonds, and currencies underlying financial futures — began to offer swap contracts and options that had the same functions as exchange-traded futures. They could be used to hedge or speculate. Growth in these markets has been explosive, as figure 2 below shows.

The new derivatives market, where swaps and similar instruments are traded "over-the-counter" (OTC) or off-exchange, has grown much faster than the exchange-traded derivative market since its inception in the 1980s, in terms of the notional principal amount of contracts in force.[6] When other OTC instruments, such as options and forward agreements are included, the total notional value of the OTC market was $81.4 trillion in June 1999.[7]

Traders often view OTC contracts and exchange-traded futures and options contracts as close substitutes. The over-the-counter and the exchange markets compete for the same business. A central issue for the CFTC reauthorization in 2000 was whether regulation under the CEA put the U.S. futures industry at a competitive

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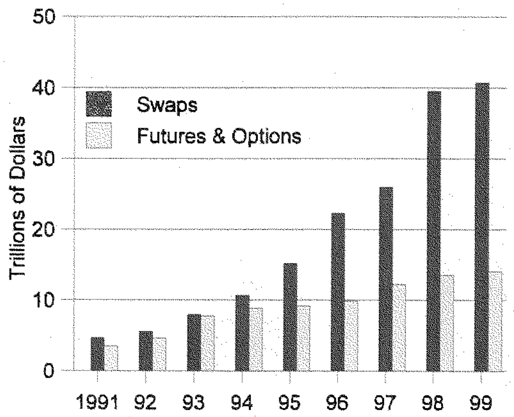
[6] Although notional principal is the only basis for comparing the two markets, it is not a very satisfactory measure. Notional value does not convey any useful information about the market value or riskiness of a particular instrument. Moreover, contracts are traded much more frequently on the exchanges, so that comparisons of value outstanding at the end of a period may be misleading as a gauge of total market activity.

[7] Bank for International Settlements. *The Global OTC Derivatives Market at end-June 1999.* November 1999. 5 p. (Available on the Internet at www.bis.org)

Figure 1. Notional Value of OTC Swaps versus Exchange-Traded Financial Contracts, 1991-99



Source: Bank for International Settlements.

disadvantage relative to the OTC markets, and to foreign futures exchanges.

Pre-2000 Regulation of Derivatives

Federal regulation of futures trading dates from the Grain Futures Act of 1922 (P.L. 67-331), which became the Commodity Exchange Act. However, the major features of the pre-2000 regulatory framework date from 1974, when Congress perceived that derivatives markets were on the verge of expanding from contracts based on farm commodities and metals into "financial futures" – contracts based on government bonds, interest rates, and (later) stock indexes. In response to the growing economic scope and importance of futures trading, Congress replaced the existing futures regulator (an office within the Department of Agriculture) with an independent agency, the CFTC, with exclusive jurisdiction (with a few important exceptions) over all derivatives trading, regardless of the nature of the underlying commodity.

The CEA, as amended in 1974, specified that trading of derivatives – any contracts that were "in the character of" futures contracts – was to take place only on a registered futures exchange whose rules and practices were under CFTC regulation. The rationale for this grant of regulatory authority was that derivatives are susceptible to manipulation and excessive speculation, which can cause artificially high or low prices in the underlying cash markets, or, in extreme cases, instability and panic in the financial system. At a time when oil and other commodities were in short supply and prices were soaring, Congress sought a "strong law" to protect investors and to insulate the economy from the potentially distorting effects of derivatives trading, much as the Securities and Exchange Commission (SEC) was created in 1934 in response to the stock market crash of 1929.

However, the extension of "exclusive" jurisdiction to the CFTC had to take note of other agencies' claims. The major exceptions to the CFTC's exclusive jurisdiction were contained in the so-called "Treasury Amendment," part of the 1974 law. The Treasury expressed concern that exclusive CFTC jurisdiction would conflict with the U.S. government securities market and the foreign exchange market, where several forms of off-exchange contracts very similar to futures and options were in common use. These were professional markets, where small investors were not present, and were for the most part unregulated. They were, in the Treasury's view, performing in a satisfactory manner without significant government oversight. Therefore, Treasury saw no reason why these self-regulating markets should be brought under CFTC regulation. Congress wrote the Treasury Amendment into law, excluding contracts based on U.S. government securities or foreign exchange from the provisions of the CEA.

What no one could have foreseen in 1974 was the development of the OTC swap market. Despite the fact that swaps and futures serve exactly the same economic purposes, and are sometimes interchangeable, the CFTC generally exercised no regulatory authority over the OTC market. How did this market (now measured in the tens of trillions of dollars) develop outside the regulatory framework of the CEA? As the market was established in the 1980s, the CFTC made no move to assert its jurisdiction: the major swaps dealers were large banks and securities firms, rather than the futures brokers that were CFTC registrants. Banking regulators took a laissez-faire attitude, perhaps viewing swaps as a welcome source of income for depository institutions whose recent results in commercial and international lending had ranged from poor to disastrous. Securities broker-dealers tended to locate their swaps business in unregulated affiliates, where SEC authority was extremely limited.

Still, a legal uncertainty remained. Could the courts rule that swaps were in fact "in the character of" futures contracts, and thus illegal and unenforceable unless traded on a CFTC-regulated exchange? In 1989, the CFTC issued an exemption for swaps, which was revised in 1993 (pursuant to the Futures Trading Practices Act of 1992, P.L. 102-546).[8] Under the terms of the 1993 exemption, swaps would not be regulated under the CEA as long as they met four conditions that distinguished them from exchange-traded futures:

- swaps may be traded only by "eligible participants," that is, financial institutions, corporations, governmental units, and individuals with assets over $10 million;
- the terms of swap agreements must be individually negotiated between the counterparties, rather than standardized contracts like futures and exchange-traded options;

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[8] In April 1993, the CFTC issued a separate exemption for OTC energy derivatives: these would not be considered subject to the CEA as long as all parties were actually involved in the underlying energy businesses, all contracts were subject to negotiation as to their material terms, contracts were held to expiration rather than traded actively, and all trades involved only principals. See *Federal Register*, v. 58, April 20, 1993. p. 21286.

- the creditworthiness of the counterparty must be a material consideration in swaps transactions;[9] and
- there must be no "multilateral transaction execution facility," i.e., a swaps exchange.

In 2000, the financial swap market satisfied only the first of these conditions. Many swap contracts are standardized and fungible, and are traded short-term like any other financial instrument. Both in the United States and elsewhere, swaps exchanges and clearing houses had been introduced or proposed. Therefore, the legal uncertainty of possible conflict with the CFTC's exclusive jurisdiction remained, and there were concerns that the CEA and the CFTC exemptions were preventing the swaps market from adopting features of the exchange system (e.g., the clearing house) that would improve market safety and efficiency, or may have pushed such developments abroad.

Legal uncertainty in the U.S. OTC market was a major issue in the 2000 CFTC reauthorization. Market participants and regulators supported making the current exemptions from the CEA a matter of statute rather than regulation, thereby settling the long dispute over who does (or should) have regulatory jurisdiction over swaps. This was done by the Commodity Futures Modernization Act of 2000, as described in CRS report RS20560, *Derivatives Regulation: Legislation in the 106th Congress.*

Regulatory Jurisdiction over Derivatives

Regulation of OTC Contracts

Jurisdiction over OTC derivatives was a central issue in the 2000 CFTC reauthorization. Congressional efforts to address the issue in the past were made difficult by disagreements among federal regulators. A 1999 report issued by the President's Working Group on Financial Markets, however, showed that the regulators had reached consensus on this and some related issues.[10] The report recommended that swaps and other OTC markets should be excluded from the CEA, provided 1) that no retail investors are active in the markets and 2) that the contracts traded are not based on nonfinancial commodities whose supply is finite.[11] These recommendations proceeded from the regulators' conclusion that the two justifications for CEA-style regulation of derivatives – small investor protection and the potential for price manipulation – did not apply to the swaps market. That is, participants in that market are sophisticated and have the means to protect their own interests, and, secondly, manipulation of interest or exchange rates via the swaps market has not been observed in 20 years and is highly unlikely to occur in the future.[12] In short, the regulators argue that the swaps market is like the government bond market or the foreign exchange market, where the general, longstanding view is that no public interest is served by more than a minimal regulatory presence.

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[9] All futures contracts are guaranteed against one party's default through the exchange's clearing house, an association of exchange members, which in effect takes the opposite side of each trade. Thus, the creditworthiness of the other party is not a consideration to futures traders. Under the exemption, swap traders must assess and assume the risk of counterparty default themselves.

[10] President's Working Group on Financial Markets. *Over-the-Counter Derivatives Markets and the Commodity Exchange Act.* November 1999. 35 p. (Hereinafter cited as *Working Group Report.*) The Working Group consists of the Secretary of the Treasury and the chairmen of the Federal Reserve, the SEC, and the CFTC.

The choice before Congress in 2000 was whether to accept the recommendations of the Working Group. It could choose to exclude swaps from the CEA by expanding the existing exemption (to permit swaps clearing houses and exchange-like trading facilities) and making the exclusion a matter of statute rather than of regulation. The effect of such action, besides reducing legal uncertainty in the swaps market, would be to allow the OTC market to adopt features (clearing houses and multilateral trading systems) of the exchange markets – to strengthen self-regulation, in other words. Some viewed such changes in the marketplace as not only desirable in themselves[13] but essential to protect the U.S. industry. Federal Reserve Chairman Alan Greenspan testified on February 10, 2000 that

> ...I see a real risk that, if we fail to rationalize our regulation of centralized trading mechanisms for financial instruments, these markets and the related profits and employment opportunities will be lost to foreign jurisdictions that maintain the confidence of global investors without imposing so many regulatory constraints.[14]

The Working Group's implicit conclusion was that unregulated financial speculation is generally benign. The other view of speculation – embodied in the pre-2000 CEA – is that it may at times become excessive, and that artificial (and unwelcome) price volatility and market instability may follow. Accordingly, Congress could have chosen to apply to the OTC market some of the regulatory requirements that applied to the exchanges. The Working Group recommends that swaps clearing houses – which represent a concentration of risk[15] – should be

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[11] While the Working Group did not recommend that "finite supply" commodities be excluded from the CEA, because of manipulation concerns, it did endorse the exemption for energy derivatives that the CFTC had issued in 1993, and urged that the CFTC retain and use its exemptive authority in those markets that it did regulate.

[12] Ibid., p. 16.

[13] A swaps exchange could mean greater transparency, as prices became available to all market participants. The ability to open and close positions quickly could increase liquidity, reducing the cost of hedging. A clearing house would reduce the cost of monitoring counterparties' creditworthiness, again possibly lowering the costs of hedging.

[14] Testimony before the Senate Banking Committee on the report of the President's Working Group on Financial Markets. Hearing, 106th Congress, 2nd session, February 10, 2000.

[15] A clearing house is a vehicle by which the market collectively assumes the risk of default,

(continued...)

overseen by some federal regulator (or a foreign regulator that sets appropriate standards), but acknowledges that jurisdictional problems may emerge as differently-regulated institutions offer clearing services for contracts based on many different underlying interests.[16]

The Working Group report also recommended that currently unregulated OTC derivatives dealers should be required to disclose certain financial information to regulators, in order that the regulators may be aware of developing problems in the OTC dealer affiliate that may threaten the regulated parent firm, whose financial stability is a matter of public interest.[17] Other aspects of CEA- and exchange-type regulation that Congress could have imposed on OTC dealers include minimum capital standards, registration of personnel, reporting of large trades and market positions, various record keeping requirements, disclosure of transaction price and volume data, and so on. However, measures of this type would draw the objection that unilateral U.S. regulation will simply drive the business overseas.

The Commodity Futures Modernization Act of 2000 (CFMA) as enacted excludes financial OTC derivatives from CFTC regulation, provided that trading occurs only among "eligible contract participants:" financial institutions, businesses, government units, professional traders and brokers, institutional investors, individuals with over $10 million in assets, and so on, but *not* small businesses or individual investors. Derivatives based on agricultural commodities, on the other hand, remain under CFTC jurisdiction and can only be traded on regulated exchanges. All other commodities – including energy and metals – fall into a third category of "exempt commodities." OTC derivatives in exempt commodities may be traded among eligible contract participants without CFTC regulation, but certain CEA provisions against fraud and manipulation continue to apply to these markets.

OTC clearing houses and exchanges are subject to various disclosure and oversight provisions in the CFMA. The 2000 law contains no provisions requiring disclosure by unregulated derivatives dealers.

Deregulation of the Futures Exchanges

The Issue of Fair Competition.

OTC derivatives and exchange-traded financial futures contracts are direct competitors in the marketplace. Before the 2000 legislation, the futures exchanges contended that the unregulated status of the OTC markets constituted an unfair competitive advantage. The pre-2000 CEA required the exchanges to submit rule

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[15] (...continued)
removing the risk that a single swaps dealer could be hurt by a customer default. On the other hand, a clearing house failure – during a severe market disruption – could cause wider systemic problems than a single dealer failure.

[16] *Working Group Report*, p. 19. The report does not make specific recommendations as to the kind of regulatory oversight that would be desirable.

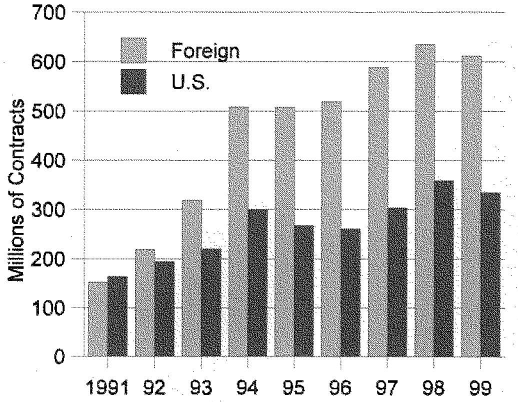
[17] Ibid., p. 34. This would involve amending the securities laws, as well as the CEA.

changes and new contracts for CFTC approval, to maintain an audit trail for all transactions, to collect data on the trading activity positions of large traders, to include outsiders on governing boards and disciplinary committees, and so on. Futures commission merchants (brokers) must register with the CFTC, must meet proficiency and ethical standards, must segregate customers' funds, and must disclose financial information about themselves and certain of their affiliates. In addition, the CFTC has broad authority to intervene in exchange affairs when it determines that the public interest requires it. Such "micro-regulation" does not apply to the OTC markets.

The exchanges for years called for a "level playing field." In addition to competition from the fast-growing OTC markets (see figure 2 above), U.S. exchanges now face competition from foreign futures exchanges, as figure 3 suggests. As electronic trading systems proliferate, and as the trading day lengthens, a foreign futures exchange listing identical contracts and offering a cost advantage could take away significant amounts of the U.S. industry's business.[18]

The 105th Congress considered, but did not enact, legislation that would have permitted the exchanges to operate "professional markets," from which small investors would be excluded, and which would as a result be free of most of the requirements of the CEA.[19] Similar proposals reappear in the Working Group's report, which questions the need for direct regulation of financial futures markets if

Figure 2. Futures Contracts Traded: U.S. versus Foreign Exchanges, 1991-99



Source: Bank for International Settlements.

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[18] Such international "poaching" is not hypothetical: Singapore dominates the market for Japanese stock index futures, and London was the center for contracts based on German government bonds until the recent emergence of a liquid futures market in Germany.

[19] H.R. 467 and S. 257 (105th Congress). See CRS Report 97-413 E, *The Commodity Exchange Act: Legislative History Since 1974*, for analysis of these proposals.

small investors needing protection from fraud are absent and if the possibility for manipulation is small. The report calls for Congress to provide explicit authority for the CFTC to provide regulatory relief for exchange-traded financial futures markets, if it determines that such relief is in the public interest.[20] Again, the line is drawn between financial futures and contracts based on physical commodities where supply is limited (making the creation of artificial shortages possible) and where the futures markets serve a price discovery function, that is, where the futures market price is a benchmark for cash market transactions.

Chairman William Rainer of the CFTC supported these deregulatory initiatives. The CFTC had in progress two rulemaking initiatives that would allow the exchanges to introduce new contracts or to change their rules without prior CFTC approval. To the exchanges, these were crucial changes that would allow them greater flexibility in responding to competition. The chairman stated his intention of moving the CFTC "from being a frontline to an oversight regulator."[21] This meant, basically, that the CFTC would stand back and let the financial derivatives markets evolve in response to market forces, and step in only if something goes wrong. The Working Group takes a similar attitude towards the rapidly-changing OTC market: "[S]uch systems should be allowed to grow, unburdened by a new anticipatory statutory structure that could prove entirely inappropriate to their eventual evolution."[22]

The CFMA includes provisions that allow the futures exchanges to establish less-regulated or unregulated markets in nonagricultural contracts from which small investors would be excluded. As of early 2002, however, a year after passage of the CFMA, the exchanges had not proposed to create such unregulated markets.

It is worth noting that the major costs of exchange trading – margin requirements, marking-to-market (which requires losses to be paid up daily), and clearing fees – are not the results of government regulation but of self-regulation. They are imposed by the industry itself to assure market integrity – to insure, that is, that all contracts are fulfilled. A number of current ventures propose to bring some of these self-regulatory mechanisms to the OTC market, as noted above. However, it is not clear that exchange-trading of swaps or a swaps clearing house will succeed in the marketplace. The major swaps dealers – 10 institutions accounted for 45% of the market at the end of 1998[23] – may resist changes in market structure that could challenge their dominance.

Regarding competition from foreign futures markets, a strong system of regulation may be a marketing advantage. Traders will certainly seek out the lowest transaction costs, but their perceptions of market integrity will also influence their choice of trading venues.

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[20] *Working Group Report*, p. 21-23.

[21] Remarks of CFTC Chairman William J. Rainer at the 22nd Annual Chicago-Kent college of Law Derivatives and Commodities Law Institute. Chicago, October 28, 1999.

[22] *Working Group Report*, p. 18.

[23] Trend Toward Concentration Accelerated Last year. *Swaps Monitor*, vol. 12, August 2, 1999. p. 1. The top 20 institutions, of which 9 are American, had 64%, up from 50% in 1995.

It is uncertain how the futures trading would change if financial futures were deregulated. Would major features of exchange system (such as standardized contracts and uniform margin rules) be abandoned, even as the OTC market considers adopting them? An advantage of the OTC market is said to be the flexibility of tailoring the terms of each contract to the customer's individual needs. Customization, however, discourages short-term trading, making it difficult to develop the kind of high-volume liquidity that characterizes the exchange system (and which the OTC market would like to foster).

Other Regulatory Issues

Single-Stock Futures and the Shad-Johnson Accord

In November 1999, Senators Gramm and Lugar sent a letter to regulators asking for a study of the feasibility of removing the pre-2000 ban on futures contracts based on individual stocks. The ban dated from the Shad-Johnson accord of 1982, which demarcates SEC and CFTC jurisdiction over stock-based derivatives contracts.[24] The SEC traditionally opposed such futures contracts on the grounds that the leverage available in futures contracts (purchase of a futures contract generally requires a cash outlay of only 3-6 percent of the cash value of the underlying commodity) could lead to excessive price volatility and manipulation of the underlying stocks' price, and that individual stock futures could also serve as a vehicle for illegal insider trading. Nevertheless, the Working Group report states that the members agree that the prohibition against single-stock futures "can be repealed if issues about the integrity of the underlying securities market...are resolved."[25] The report does not call for immediate repeal, however, but urges further study of the issue by the SEC and the CFTC.

The CFMA authorized trading in single-stock futures, although over the course of consideration of the legislation, the instruments came to be known as "security futures." Security futures will be traded on either stock or futures exchange, and the SEC and CFTC will share regulatory jurisdiction. The CFMA states that trading may begin one year after enactment, but as of December 20, 2001, the rules and regulations were not yet in place.

When trading begins, single stock futures can be expected to boost trading volume in futures and in the underlying stocks themselves. Millions of shares are traded daily on the New York Stock Exchange as part of index arbitrage trading strategies – the buying and selling of shares in response to fluctuations in the price of stock index futures and options.

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[24] Basically, the accord said that futures and options on futures could be traded on futures exchanges, while options on indexes and individual stocks would be traded on securities exchanges under SEC jurisdiction. The SEC retained a right of approval over new stock-based derivatives contracts to be traded on futures exchanges.

[25] *Working Group Report*, p. 32.

Conclusion

With their 1999 report, the regulatory agencies in the Working Group put aside their old jurisdictional quarrels and reached a consensus that speculation in financial derivatives by sophisticated institutions and individuals is generally a beneficial activity which government regulation is more likely to hinder than help. The pre-2000 Commodity Exchange Act, with its detailed guidance for market practices and its statutory bias against "excessive" speculation, is viewed by the Working Group's report (and by much of the derivatives industry) as an appropriate model for regulation of traditional agricultural commodity futures, where shortages occur and attempts to corner or squeeze the market have been more or less successful in the past. But the Working Group report viewed the CEA as an obstacle to progress in the new world of derivative finance, and as a competitive disadvantage to American firms competing in an international market.

The 2000 CFMA responds to most of the recommendations in the Working Group's report. The final legislation included a codification of the unregulated status of OTC derivatives markets and gave the CFTC authority to deregulate the financial futures contracts traded on the exchanges.

Earlier in 1999, the Working Group issued a report on hedge funds – unregulated investment pools available only to financial institutions and very wealthy individuals – that recommended the imposition of new disclosure requirements, on the grounds that the failure of a single large speculator with a highly-leveraged position could cause widespread financial disruption.[26] The report noted that the proprietary trading operations of large banks and securities firms pursue the same trading strategies as hedge funds, and pose the same risks. As noted above, a few dozen large banks and brokerages dominate the market for OTC derivatives. Legislation considered but not passed by the 106th Congress would have required the largest hedge funds to file quarterly reports on the size and riskiness of their market positions with the Federal Reserve.[27]

In late 2001, the collapse on Enron Corp., a large unregulated dealer in OTC energy derivatives, raised questions about whether the CFMA left unfinished business. Would imposing disclosure requirements on OTC dealers bring more transparency to the markets? Enron's rapid fall revealed that even sophistcated observers – such as Wall Street analysts and bond raters – had no clear picture of the firm's true financial condition, or even the precise nature of its business activities. While the Enron bankruptcy seems to have had little visible effect on physical cash markets in energy products, in other circumstances the failure of a large derivatives dealer might have wide repercussions and do damage to firms not directly involved with the failed dealer.

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[26] President's Working Group on Financial Markets. *Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management.* April 1999. 43 p. and appendices.

[27] See CRS Report RS20394, *The Hedge Fund Disclosure Act: Analysis of H.R. 2924.*

A reduction of government regulation (or an endorsement of the unregulated status of certain markets, which the CFMA was) need not increase the potential for market instability. In fact, the U.S. financial system has proved to be very robust and resilient in response to a series of financial shocks linked to derivatives – from the 1987 stock market crash to the Long-Term Capital Management hedge fund rescue in 1998, and now the Enron bankruptcy. However, similar events can be expected in the future,[28] and government agencies will have to act, on the basis of whatever information they have in hand, to prevent crises from spreading and spilling over into the real economy. The question in regard to unregulated derivatives dealers is whether regulators and market participants have sufficient information to detect financial crises in advance, or respond to them as they occur.

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[28] As the Working Group's hedge fund report (see note 25 supra) puts it: "[M]arket history indicates that even painful lessons recede from memory with time." (p. viii)

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Securities Industry and Financial Markets Association

THE FINANCIAL SERVICES ROUNDTABLE

June 18, 2008

Dear Senators and Congressmen:

We represent participants in America's financial services sector, including banks and investment firms, investment companies, pension funds, individual retirement accounts, manufacturers and retailers. Our sector of the economy produces 8% of America's GDP and employs 5% of our workers. In fact, the companies and individuals we represent can be found in every city and town across the US.

In recent weeks, you may have heard complaints about speculation in the energy and commodity markets. We are writing to make two basic points:

First, liquid and efficient energy and commodities markets are essential to the economy, and speculators play a crucial role in these markets. As discussed in more detail below, speculators take the risks hedgers want to avoid. Without speculation, consumers would likely pay more for energy and commodities.

Second, some of the drastic proposals to revamp futures market regulation now being discussed would be counter-productive. Those proposals range from an outright ban on speculation in commodities and energy futures markets to higher margin requirements to revocation of important international agreements on cooperation with foreign regulators. They would drive needed speculative capital from our markets to other trading venues that are less accessible to U.S. regulators or generally less transparent. These proposals do not offer realistic responses to markets that are global and linked more and more everyday by nano-second trading technology.

Commodities and energy derivatives markets (including both over-the-counter and exchange traded) provide a valuable means by which businesses and individuals can hedge the risk of adverse movements in commodity prices. America's derivatives exchanges are the largest in the world, and, in recent years, both on and off exchange derivative activity in the U.S. has seen tremendous growth.

These markets are composed of both "hedgers," who are persons seeking to hedge some sort of financial or other risk, and "speculators," who are persons willing to take on that risk in the hope of making a profit. Some hedgers seek to mitigate the risk of price increases and others seek protection from prices falling. Thus hedgers can be found on both sides of the market. Similarly, speculators are not uniformly buyers or sellers in the market, but can also be found on both sides of the market. Speculators perform a very important market function in providing liquidity to the market, making it possible for hedgers to efficiently enter and exit the market and reducing the bid-offer spreads and the transaction costs of all market participants. Both hedgers and speculators are needed for a market to serve its price-discovery function.

Unfortunately, some have confused speculation with manipulation or other abusive market practices. Blaming speculation or any specific trading practice for rising or falling commodity and energy prices without real evidence of wrongdoing is misguided. Those kinds of charges create the very real possibility that speculators will choose to abandon these markets and use their investment dollars elsewhere. Such an exodus threatens the healthy functioning of the markets and the economy.

Our futures markets and commodity regulators already have and utilize significant regulatory authority in the form of speculative position limits, large trader reporting requirements, and special call authority, as well as

market surveillance resources and enforcement powers to prevent, detect and prosecute attempted manipulations. With regard to energy prices in particular, Congress has been active in recent years establishing new authority for a number of federal regulators. For instance in 2005 Congress increased the authority of the Federal Energy Regulatory Commission to pursue wrongdoing in the markets for electricity and natural gas as part of the Energy Policy Act. In 2007 Congress gave the Federal Trade Commission authority to pursue fraud and manipulation in the wholesale market for petroleum products as part of the Energy Independence and Security Act. And just last month Congress substantially increased the Commodity Futures Trading Commission's oversight and regulation of electronic commercial markets as part of the Farm Bill.

In addition to allegations of excess speculation, some have focused on the role of institutional investors in commodity and energy prices. These include investors such as public and private pension funds, investment companies, and commodity index tracking funds. These investors allow average middle class Americans to hedge the risk of rising prices by giving them exposure to commodities, which serves as a hedge against inflation risk. Because of the ability, for example, to protect persons such as retirees or prospective retirees from seeing their assets decline, these types of investments have increased in popularity in recent years.

Some have confused these trading opportunities with rising commodity prices, and sought to limit the ability of institutional investors to access derivatives. If successful these efforts would substantially harm the ability of Americans to protect themselves against inflation and would wrongly limit their investment options in general. Before Congress takes any action to limit the ability of average Americans to protect themselves from inflation in this way, it should make certain that the alleged adverse market effects of these kinds of investments have a real basis in fact.

We applaud Congress' efforts to explore abusive market practices. We fully support efforts to ensure America's commodity markets remain fair, liquid and competitive. To that end we endorse efforts to increase funding for the CFTC. However, we strongly urge caution when it comes to the reform of these markets. Hastily enacted initiatives threaten to undermine these markets at the very time they are most needed and damage them to the detriment of both America's financial competitiveness and our overall economic health. Congress should take great care to ensure that the unintended consequences of any proposed market reforms will not outweigh any potential perceived benefits. A careful, studied and measured approach is critical to these efforts.

Thank you for your consideration.

Sincerely,

International Swaps and Derivatives Association

Futures Industry Association

Managed Funds Association

Investment Company Institute

Securities Industry and Financial Markets Association

The Financial Services Roundtable

Key terms for Energy Speculation Hearing 6/23/08

Bilateral markets—These are over-the-counter (OTC) markets where trades are conducted directly between two parties via telephone or computer. Bilateral markets are not currently subject to the U.S. Commodity Futures Trading Commission (CFTC) regulation or disclosures.

Brent Crude Oil—The Brent Crude Oil contract is traded on the InterContinental Exchange (ICE) and provides a benchmark price for much of the oil produced in Europe. Brent Crude is sourced from the North Sea.

CFTC Special Call—Issued May 29, 2008, this will allow CFTC to gather data on the size of commodity index and commodity swap positions, and clarify the size of speculative index investor positions.

Commitment of Traders (COT) report—Weekly report published by the CFTC listing the open index of its nine regulated exchanges. The CFTC divides traders into "commercial" and "non-commercial" trading categories.

Commercial vs. Non-Commercial categories—How the CFTC categorizes traders in its Commitments of Trader reports. The Non-Commercial trader category includes hedge funds and traditional speculators. The Commercial trader category includes physical producers, refiners, consumers, and swap dealers. Since CFTC's classification of "commercial" traders includes speculators such as swap dealers, it is currently impossible to tell how much of the commercial trading going on is actual physical hedgers versus speculators. CFTC announced it will re-examine this classification problem.

Commodity Indexes—The two most popular indexes are the GSCI and the DJ-AIG. Because futures prices have become the benchmark for spot market prices, the indexes are based on commodities futures prices, not physical commodity prices

> **S&P GSCI**—Standard & Poors-Goldman Sachs Commodity Index, holds about 60 percent of the commodity futures market share. It includes 24 commodities weighted worldwide.
>
> **DJ-AIG**—Dow Jones- AIG Commodity Index holds about 35 percent of the commodity futures market share and includes 19 commodities weighted worldwide.

Derivatives—A financial instrument whose characteristics and value depend upon the characteristics and value of an underlier, typically a commodity (e.g., oil), bond, equity, or currency. Examples of derivatives include futures, swaps, and options.

Designated Contract Market (DCM)—A commodity market regulated by the Commodity Futures Trading Commission. Examples are NYMEX and the Chicago Mercantile Exchange. Trading is done on electronic platforms and through voice brokers in the trading "pits" or "floor." All futures trades on NYMEX go through a clearing house.

Enron Loophole—As part of the Commodity Futures Modernization Act of 2000, the "Enron Loophole" created an exemption for large energy traders (over $10 million in assets) to trade futures on unregulated exempt commercial markets, such as ICE. The Food Energy Security Act of 2008 partially closes this loophole by subjecting traders on ECMs to market integrity rules and reporting requirements if the energy contract is deemed a "significant price discovery contract." CFTC must make the distinction of what is a significant price discovery contract.

Exempt Commercial Market (ECM)—An over-the-counter electronic trading platform used by large traders (> $10 million assets) which is exempted from regulation pursuant to Section 2(h)(3) of the Commodities Exchange Act. Traders can obtain prices and execute trades off-exchange. Examples include ICE-OTC and the Chicago Climate Exchange.

FSA—The Financial Service Authority is the U.K. version of the CFTC. The FSA has a different regulatory scheme than CFTC and does not require position limits, accountability levels, or publish Commitment of Trader reports. The FSA regulates ICE.

Foreign Board of Trade Loophole—This loophole allows a foreign board of trade to avoid registering as a designated contract market by receiving a "no-action letter" from the CFTC. Once exempted, the exchange is not subjected to CFTC regulation and the same regulations imposed on NYMEX.

Futures—A futures contract is a standardized, transferable, exchange-traded contract that requires delivery of a commodity (e.g., oil), bond, currency, or stock index, at a specified price, on a specified future date. Generally, the delivery does not occur; instead, before the contract expires, the holder usually "squares their position" by paying or receiving the difference between the current market price of the underlying asset and the price stipulated in the contract.

ICE—The Intercontinental Exchange. ICE Futures Europe offers the WTI Crude Oil contract on trading screens located in the U.S.

Index Speculator—Index speculators are predominantly institutional investors such as pension funds, sovereign wealth funds, university endowments, public and private foundations, and life insurance companies. Index speculators are trying to profit from price movements in commodity futures, but are not involved in the production or consumption of any tangible commodity, nor are they able to make or take delivery of the commodities they are trading.

Liquidity—Generally defined as an assets ability to be converted through an act of buying or selling without causing a significant movement in the price.

Margin—A margin is collateral that the holder of a position in securities, options, or futures contracts has to deposit to cover the credit risk of his counterparty (most often his broker).

Open Interest—The total number of options and/or futures contracts that are not closed or delivered on a particular day. Open interest represents the amount of derivative contracts that are currently active as opposed to the volume, which represents the amount of options or futures traded on a particular day.

Physical hedgers—Producers, refiners, or consumers of commodities who are hedging (buying futures in the commodities markets) in order to offset their price risk. Examples include an oil producer who wants to lock in his future selling price for when he extracts and sells his oil months from now. Hence, he will purchase a futures contract guaranteeing future delivery of a set amount of oil at a certain price. A heating oil dealer will lock in winter purchase costs in the prior summer to protect himself from rising oil prices. A farmer may seek to lock in the price of wheat in the spring to protect against price changes when it comes time to harvest in the fall.

Position limits—CFTC-imposed or exchange-imposed limits placed on the number of contracts held by an entity. The CFTC currently imposes position limits on speculators, but not those deemed "bona fide hedgers" or those who have an underlying physical position in the market. The FSA does not impose position limits on the exchanges it regulates.

Rolling/Goldman Roll—Because speculators do not wish to take delivery of the commodities they are trading, at the end of each contract period they must roll their positions. Traders must roll their positions in the same manner that the indices roll their weight at the end of each monthly contract period. Traders sell the expiring contract and buy a new one so that their overall position in the commodities market remains the same, but no physical delivery need occur. Because of the size and the regularity of this rolling pattern, it has come to be known as the Goldman Roll in trading circles and speculators will strategically plan to position themselves around it taking place.

Short and Long Positions—In the case of a futures contract, a short position is the promise to sell a certain quantity of a good at a particular price in the future. A long position is the promise to buy a certain quantity of a good at a particular price in the future.

Sovereign Wealth Fund (SWF)—State-owned investment funds. Some are investing in commodities indexes through swaps in the same manner as other institutional investors. The total assets managed under sovereign wealth funds amount to around $3 trillion. Countries with large SWFs include UAE, Singapore, Norway, China, and Kuwait.

Spreads—A spread trade refers to the act of buying one security or futures contract and selling another related one, in an attempt to profit from the change in the price difference between the two. Common examples are: a crack spread, trying to profit between the change in price difference of crude oil and gasoline; an option spread, seeking to profit between the price difference of two option contracts on the same underlying stock or commodity; and a calendar spread, trying to profit between the price difference of an option or commodity with different expiration/delivery dates.

Swap—A swap is a derivative in which two parties agree to exchange one stream of cash flows against another stream. These streams are called the legs of the swap. Swaps can be used to hedge certain risks such as interest rate changes, or oil price changes. The cash flows are calculated over a notional principal amount, which is usually not exchanged between parties.

How they work in the Commodities Market—Investment in the commodities markets requires the investor to be very active in buying and selling futures in order to replicate the monthly index. Due to the complex and time-intensive nature of rolling these positions, 85 percent of institutional investors outsource the management of their futures trading to a Wall Street bank like Goldman Sachs. They do this by entering into commodity index swaps with these banks.

In a typical commodity index swap, the institutional investor (ex. pension fund) agrees to pay the bank a management fee and a 3-month Treasury-bill rate. The bank agrees to pay the investor the total return on either the GSCI or DJ-AIG index in exchange. The pension fund will invest the notional value of the swap in T-bills, and make periodic payments to the bank. The bank is then obligated to pay the total return index, and in order to do so must hedge its position by buying futures in the commodities market. The result of this is that swap dealers are investing large amounts of capital into the commodities markets on behalf of the institutional investors, but are classified as commercial traders and not subject to position limits (see swap loophole below).

Swap loophole—Bona fide hedgers who have commercial operations—like an oil producer or a farmer—are exempted from position limits. In 1991, however, the CFTC began to classify swaps dealers as "bona fide hedgers" based on the argument that they have a price risk.

Traditional Speculator—A traditional speculator in the commodity market makes decisions about whether to buy or sell futures based on what is going on in the physical market and in line with supply and demand fundamentals. They are needed to provide liquidity in the futures markets as they ensure there are needed buyers and sellers available when there is a mismatch between producers and consumers who want to hedge their price risk.

WTI Crude Oil—The West Texas Intermediate (WTI) futures contract serves as the benchmark price used for most spot market transactions. The WTI began trading in 1983 and now is traded on NYMEX and ICE. Each WTI oil futures contract represents 1,000 barrels of oil. At $134 per barrel, the notional value of one contract is $134,000.

Testimony of

Michael W. Masters

Managing Member / Portfolio Manager

Masters Capital Management, LLC

before the

Committee on Homeland Security and Governmental Affairs

United States Senate

May 20, 2008

Good morning and thank you, Mr. Chairman and Members of the Committee, for the invitation to speak to you today. This is a topic that I care deeply about, and I appreciate the chance to share what I have discovered.

I have been successfully managing a long-short equity hedge fund for over 12 years and I have extensive contacts on Wall Street and within the hedge fund community. It's important that you know that I am not currently involved in trading the commodities futures markets. I am not representing any corporate, financial, or lobby organizations. I am speaking with you today as a concerned citizen whose professional background has given me insight into a situation that I believe is negatively affecting the U.S. economy. While some in my profession might be disappointed that I am presenting this testimony to Congress, I feel that it is the right thing to do.

You have asked the question "Are Institutional Investors contributing to food and energy price inflation?" And my unequivocal answer is "YES." In this testimony I will explain that Institutional Investors are one of, if not the primary, factors affecting commodities prices today. Clearly, there are many factors that contribute to price determination in the commodities markets; I am here to expose a fast-growing yet virtually unnoticed factor, and one that presents a problem that can be expediently corrected through legislative policy action.

Commodities prices have increased more in the aggregate over the last five years than at any other time in U.S. history.[1] We have seen commodity price spikes occur in the past as a result of supply crises, such as during the 1973 Arab Oil Embargo. But today, unlike previous episodes, supply is ample: there are no lines at the gas pump and there is plenty of food on the shelves.

If supply is adequate - as has been shown by others who have testified before this committee[2] - and prices are still rising, then demand must be increasing. But how do you explain a continuing increase in demand when commodity prices have doubled or tripled in the last 5 years?

What we are experiencing is a demand shock coming from a new category of participant in the commodities futures markets: Institutional Investors. Specifically, these are Corporate and Government Pension Funds, Sovereign Wealth Funds, University Endowments and other Institutional Investors. Collectively, these investors now account on average for a larger share of outstanding commodities futures contracts than any other market participant.[3]

These parties, who I call *Index Speculators*, allocate a portion of their portfolios to "investments" in the commodities futures market, and behave very differently from the traditional speculators that have always existed in this marketplace. I refer to them as "Index" Speculators because of their investing strategy: they distribute their allocation of dollars across the 25 key commodities futures according to the popular indices – the Standard & Poors - Goldman Sachs Commodity Index and the Dow Jones - AIG Commodity Index.[4]

I'd like to provide a little background on how this new category of "investors" came to exist.

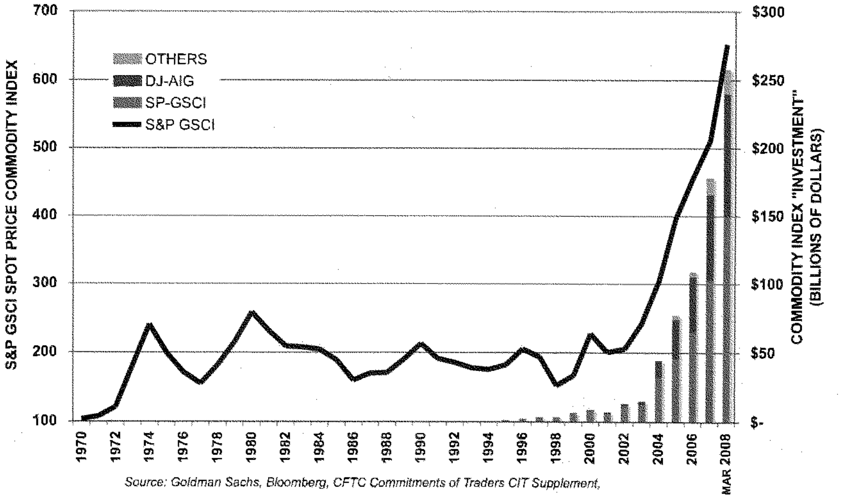
In the early part of this decade, some institutional investors who suffered as a result of the severe equity bear market of 2000-2002, began to look to the commodity futures market as a potential new "asset class" suitable for institutional investment. While the commodities markets have always had some speculators, never before had major investment institutions seriously considered the commodities futures markets as viable for larger scale investment programs. Commodities looked attractive because they have historically been "uncorrelated," meaning they trade inversely to fixed income and equity portfolios. Mainline financial industry consultants, who advised large institutions on portfolio allocations, suggested for the first time that investors could "buy and hold" commodities futures, just like investors previously had done with stocks and bonds.

Index Speculator Demand Is Driving Prices Higher

Today, Index Speculators are pouring billions of dollars into the commodities futures markets, speculating that commodity prices will increase. Chart One shows Assets allocated to commodity index trading strategies have risen from $13 billion at the end of 2003 to $260 billion as of March 2008,[5] and the prices of the 25 commodities that compose these indices have risen by an average of 183% in those five years![6]

CHART ONE

COMMODITY INDEX INVESTMENT COMPARED
TO S&P GSCI SPOT PRICE COMMODITY INDEX



Source: Goldman Sachs, Bloomberg, CFTC Commitments of Traders CIT Supplement, According to the CFTC and spot market participants, commodities futures prices are the benchmark for the prices of actual physical commodities, so when Index Speculators drive futures prices higher, the effects are felt immediately in spot prices and the real economy.[7] So there is a direct link between commodities futures prices and the prices your constituents are paying for essential goods.

The next table looks at the commodity purchases that Index Speculators have made via the futures markets. These are huge numbers and they need to be put in perspective to be fully grasped.

In the popular press the explanation given most often for rising oil prices is the increased demand for oil from China. According to the DOE, annual Chinese demand for petroleum has increased over the last five years from 1.88 billion barrels to 2.8 billion barrels, an increase of 920 million barrels.[8] Over the same five-year period, Index Speculators' demand for petroleum futures has increased by 848 million barrels.[9] The increase in demand from Index Speculators is almost equal to the increase in demand from China!

Commodity Purchases By Index Speculators The Last 5 Years

Sector	*Commodity*	*Units*	*Previous Futures Market Stockpile January 1, 2003*	*Net Purchases Last 5¼ Years*	*Current Futures Market Stockpile March 12, 2008*
Agricultural	Cocoa	Metric Tons	18,828	303,352	322,180
	Coffee	Pounds	195,716,944	2,238,858,056	2,434,575,000
	Corn	Bushels	242,561,708	2,138,383,292	2,380,945,000
	Cotton	Pounds	544,934,999	5,548,915,001	6,093,850,000
	Soybean Oil	Pounds	163,135,678	4,312,624,322	4,475,760,000
	Soybeans	Bushels	81,028,272	890,616,728	971,645,000
	Sugar	Pounds	2,291,358,746	46,094,097,254	48,385,456,000
	Wheat	Bushels	166,738,225	967,351,775	1,134,090,000
	Wheat KC	Bushels	54,746,014	102,618,986	157,365,000
Livestock	Feed Cattle	Pounds	104,446,612	365,453,388	469,900,000
	Lean Hogs	Pounds	517,414,747	3,827,425,253	4,344,840,000
	Live Cattle	Pounds	669,766,732	5,099,033,268	5,768,800,000
Energy	Brent Crude Oil	Barrels	47,075,357	144,524,265	191,599,621
	WTI Crude Oil	Barrels	99,880,741	538,499,579	638,380,320
	Gasoil	Metric Tons	1,682,662	6,027,680	7,710,342
	Heating Oil	Gallons	1,067,859,608	2,568,925,661	3,636,785,269
	Gasoline	Gallons	1,102,184,401	2,488,458,616	3,590,643,018
	Natural Gas	Million BTUs	330,652,415	1,932,356,225	2,263,008,640
Base Metals	Aluminum	Metric Tons	344,246	3,232,406	3,576,652
	Lead	Metric Tons	82,019	158,726	240,745
	Nickel	Metric Tons	20,147	101,988	122,135
	Zinc	Metric Tons	133,381	1,182,091	1,315,472
	Copper	Metric Tons	220,096	1,144,538	1,364,634
Precious Metals	Gold	Troy Ounces	979,863	8,742,401	9,722,264
	Silver	Troy Ounces	11,126,862	152,866,187	163,993,049

Sources: Goldman Sachs, Standard & Poors, Dow Jones,
CFTC Commitments of Traders CIT Supplement, calculations

In fact, Index Speculators have now stockpiled, via the futures market, the equivalent of 1.1 billion barrels of petroleum, effectively adding eight times as much oil to their own stockpile as the United States has added to the Strategic Petroleum Reserve over the last five years.[10]

Let's turn our attention to food prices, which have skyrocketed in the last six months. When asked to explain this dramatic increase, economists' replies typically focus on the diversion of a significant portion of the U.S. corn crop to ethanol production.[11] What they overlook is the fact that Institutional Investors have purchased over 2 billion bushels of corn futures in the last five years. Right now, Index Speculators have stockpiled enough corn futures to potentially fuel the entire United States ethanol industry at full capacity for a year.[12] That's equivalent to producing 5.3 billion gallons of ethanol, which would make America the world's largest ethanol producer.[13]

Turning to Wheat, in 2007 Americans consumed 2.22 bushels of Wheat per capita.[14] At 1.3 billion bushels, the current Wheat futures stockpile of Index Speculators is enough to supply every American citizen with all the bread, pasta and baked goods they can eat for the next two years!

Index Speculator Demand Characteristics

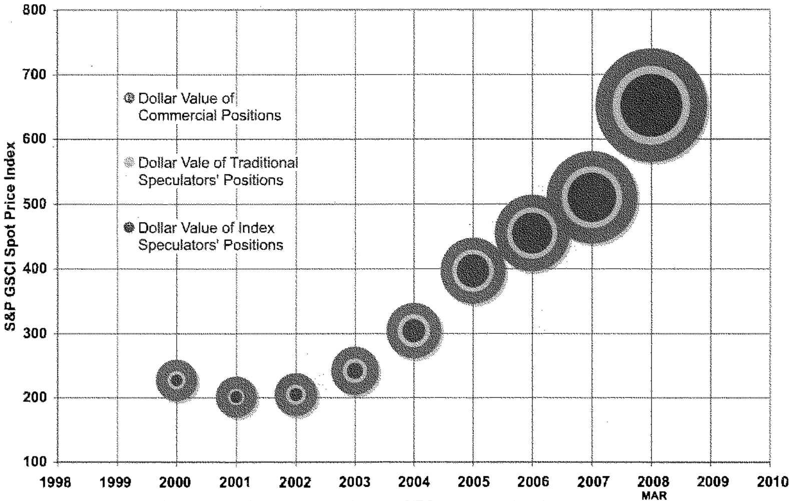
Demand for futures contracts can only come from two sources: Physical Commodity Consumers and Speculators. Speculators include the Traditional Speculators who have always existed in the market, as well as Index Speculators. Five years ago, Index Speculators were a tiny fraction of the commodities futures markets. Today, in many commodities futures markets, they are the single largest force.[15] The huge growth in their demand has gone virtually undetected by classically-trained economists *who almost never analyze demand in futures markets.*

Index Speculator demand is distinctly different from Traditional Speculator demand; it arises purely from portfolio allocation decisions. When an Institutional Investor decides to allocate 2% to commodities futures, for example, they come to the market with a set amount of money. They are not concerned with the price per unit; they will buy as many futures contracts as they need, at whatever price is necessary, until all of their money has been "put to work." Their insensitivity to price multiplies their impact on commodity markets.

Furthermore, commodities futures markets are much smaller than the capital markets, so multi-billion-dollar allocations to commodities markets will have a far greater impact on prices. In 2004, the total value of futures contracts outstanding for all 25 index commodities amounted to only about $180 billion.[16] Compare that with worldwide equity markets which totaled $44 trillion[17], or over 240 times bigger. That year, Index Speculators poured $25 billion into these markets, an amount equivalent to 14% of the total market.[18]

CHART TWO

Commodity Futures Market Size



Source: Bloomberg, CFTC Commitments of Traders CIT Supplement, calculations

Chart Two shows this dynamic at work. As money pours into the markets, two things happen concurrently: the markets expand and prices rise.

One particularly troubling aspect of Index Speculator demand is that *it actually increases the more prices increase*. This explains the accelerating rate at which commodity futures prices (and actual commodity prices) are increasing. Rising prices attract more Index Speculators, whose tendency is to increase their allocation as prices rise. So their profit-motivated demand for futures is the inverse of what you would expect from price-sensitive consumer behavior.

You can see from Chart Two that prices have increased the most dramatically in the first quarter of 2008. We calculate that Index Speculators flooded the markets with $55 billion in just the first 52 trading days of this year.[19] That's an increase in the dollar value of outstanding futures contracts of more than $1 billion per trading day. Doesn't it seem likely that an increase in demand of this magnitude in the commodities futures markets could go a long way in explaining the extraordinary commodities price increases in the beginning of 2008?

There is a crucial distinction between Traditional Speculators and Index Speculators: Traditional Speculators provide liquidity by both buying and selling futures. Index Speculators buy futures and then roll their positions by buying calendar spreads. *They never sell.* Therefore, they consume liquidity and provide zero benefit to the futures markets.[20]

It is easy to see now that traditional policy measures will not work to correct the problem created by Index Speculators, whose allocation decisions are made with little regard for the supply and demand fundamentals in the physical commodity markets. If OPEC supplies the markets with more oil, it will have little affect on Index Speculator demand for oil futures. If Americans reduce their demand through conservation measures like carpooling and using public transportation, it will have little affect on Institutional Investor demand for commodities futures.

Index Speculators' trading strategies amount to virtual hoarding via the commodities futures markets. Institutional Investors are buying up essential items that exist in limited quantities for the sole purpose of reaping speculative profits.

Think about it this way: If Wall Street concocted a scheme whereby investors bought large amounts of pharmaceutical drugs and medical devices in order to profit from the resulting increase in prices, making these essential items unaffordable to sick and dying people, society would be justly outraged.

Why is there not outrage over the fact that Americans must pay drastically more to feed their families, fuel their cars, and heat their homes?

Index Speculators provide no benefit to the futures markets and they inflict a tremendous cost upon society. Individually, these participants are not acting with malicious intent; collectively, however, their impact reaches into the wallets of every American consumer.

Is it necessary for the U.S. economy to suffer through yet another financial crisis created by new investment techniques, the consequences of which have once again been unforeseen by their Wall Street proponents?

The CFTC Has Invited Increased Speculation

When Congress passed the Commodity Exchange Act in 1936, they did so with the understanding that speculators should not be allowed to dominate the commodities futures markets. Unfortunately, the CFTC has taken deliberate steps to allow certain speculators virtually unlimited access to the commodities futures markets.

The CFTC has granted Wall Street banks an exemption from speculative position limits when these banks hedge over-the-counter swaps transactions.[21] This has effectively opened a loophole for unlimited speculation. When Index Speculators enter into commodity index swaps, which 85-90% of them do, they face no speculative position limits.[22]

The really shocking thing about the Swaps Loophole is that Speculators of all stripes can use it to access the futures markets. So if a hedge fund wants a $500 million position in Wheat, which is way beyond position limits, they can enter into swap with a Wall Street bank and then the bank buys $500 million worth of Wheat futures.[23]

In the CFTC's classification scheme all Speculators accessing the futures markets through the Swaps Loophole are categorized as "Commercial" rather than "Non-Commercial." The result is a gross distortion in data that effectively hides the full impact of Index Speculation.

Additionally, the CFTC has recently proposed that Index Speculators be exempt from all position limits, thereby throwing the door open for unlimited Index Speculator "investment."[24] The CFTC has even gone so far as to issue press releases on their website touting studies they commissioned showing that commodities futures make good additions to Institutional Investors' portfolios.[25]

Is this what Congress expected when it created the CFTC?

Congress Should Eliminate The Practice Of Index Speculation

I would like to conclude my testimony today by outlining three steps that can be taken to immediately reduce Index Speculation.

Number One:
Congress has closely regulated pension funds, recognizing that they serve a public purpose. Congress should modify ERISA regulations to prohibit commodity index replication strategies as unsuitable pension investments because of the damage that they do to the commodities futures markets and to Americans as a whole.

Number Two:
Congress should act immediately to close the Swaps Loophole. Speculative position limits must "look-through" the swaps transaction to the ultimate counterparty and hold that counterparty to the speculative position limits. This would curtail Index Speculation and it would force **ALL** Speculators to face position limits.

Number Three:
Congress should further compel the CFTC to reclassify all the positions in the Commercial category of the Commitments of Traders Reports to distinguish those positions that are controlled by "Bona Fide" Physical Hedgers from those controlled by Wall Street banks. The positions of Wall Street banks should be further broken down based on their OTC swaps counter-party into "Bona Fide" Physical Hedgers and Speculators.

There are hundreds of billions of investment dollars poised to enter the commodities futures markets at this very moment.[26] If immediate action is not taken, food and energy prices will rise higher still. This could have catastrophic economic effects on millions of already stressed U.S. consumers. It literally could mean starvation for millions of the world's poor.[27]

If Congress takes these steps, the structural integrity of the futures markets will be restored. Index Speculator demand will be virtually eliminated and it is likely that food and energy prices will come down sharply.

APPENDIX: HOW TO CALCULATE INDEX SPECULATORS' POSITIONS

If someone knows how much money is invested in the total index then it is easy to calculate how much must be in each commodity in dollars and in futures contracts.

Total Dollars Invested In Index X Weight Of Individual Commodity = Dollars In Individual Commodity

Total Dollars Invested In Index X Weight Of Individual Commodity / Dollar Value Of A Commodity Contract = # Of Contracts In An Individual Commodity

And therefore if someone knows how many contracts are in an individual commodity along with the dollar value of a contract and the weight of that commodity in the index then you can calculate the total dollars invested in the index as follows:

Of Contracts In An Individual Commodity X Dollar Value Of A Commodity Contract / Weight Of Individual Commodity = Total Dollars Invested In Index

The CFTC starting in January 2006 has been publishing the Commodity Index Trader Supplement to the Commitments Of Traders report. This supplemental report shows the reported positions of Index Speculators in 12 different agricultural commodities. Of the 12, two commodities:, KC Wheat and Feeder Cattle, are part of the S&P GSCI (and not the DJ-AIG) and one commodity: Soybean Oil, is part of the DJ-AIG (and not the S&P-GSCI). Note that 95% of dollars indexed to commodities are replicating either the S&P-GSCI or DJ-AIG.

Both the S&P-GSCI and DJ-AIG publish on a daily basis the individual weights of their constituent commodities. Also futures market data providers like Bloomberg publish daily closing prices for the commodities. Since the futures contract terms do not change that enables someone to calculate the daily dollar values of the individual commodity contracts.

So with these three data points it is simple to calculate the total dollars invested in the S&P-GSCI and the DJ-AIG on a weekly basis. And once the total dollars invested in these two indices is known then that results in the ability to calculate the number of contracts held by Index Speculators in the other 13 non-agricultural commodities.

A detailed example of this 3 step process follows.

Step One - Estimate Total Amount Invested In S&P-GSCI and DJ-AIG

According to the CFTC's January 17, 2006 CIT report, Index Specualtors had positiions in KC Wheat, Feeder Cattle and Soybean Oil of 21366 , 5613 and 59264 contracts respectively. Plugging in the weights and contract values from the appropriate sources yields the following calculations:

21,366 X $18,762.50 / 0.82% = $48,887,753,049

5,613 X $56,137.50 / 0.68% = $46,338,204,044

59,264 X $12,732.00 / 2.77% = $27,240,045,054

So the S&P-GSCI had somewhere between $46 and $49 billion invested in it and the DJ-AIG had around $27 billion invested in it. This corresponds well to the figures published by Goldman Sachs and Dow Jones.

CALCULATIONS OF INDEX SPECULATORS' POSITIONS *(JANUARY 17, 2006)*

	PERCENTAGE WEIGHTS		POSITIONS (in millions)		Contract Dollar Value	POSITIONS (in contracts)		Combined Position Estimate	CFTC Actual Positions
	S&P-GSCI	DI-AIG	S&P-GSCI	DI-AIG		S&P-GSCI	DI-AIG		
Cocoa	0.2%	0.0%	$95.5	$0.0	$15,710	6,081	0	6,081	9,390
Coffee	0.8%	2.9%	$373.2	$799.0	$46,425	8,039	17,201	25,240	28,777
Corn	2.0%	5.9%	$954.0	$1,600.0	$10,438	91,398	153,292	244,689	305,264
Cotton	0.9%	3.2%	$444.9	$862.0	$27,995	15,891	30,777	46,668	53,741
Soybean Oil	0.0%	2.8%	$0.0	$753.0	$12,732	0	59,173	59,173	59,264
Soybeans	1.4%	7.8%	$672.5	$2,116.0	$28,563	23,543	74,073	97,617	103,304
Sugar	1.9%	3.0%	$884.9	$808.0	$17,438	50,742	46,352	97,094	124,487
Wheat	2.1%	4.8%	$1,009.1	$1,300.0	$16,438	61,393	79,082	140,475	181,986
Wheat KC	0.8%	0.0%	$396.0	$0.0	$18,763	21,106	0	21,106	21,366
Feed Cattle	0.7%	0.0%	$329.5	$0.0	$56,138	5,869	0	5,869	5,613
Lean Hogs	1.4%	4.4%	$663.8	$1,185.0	$23,790	27,902	49,824	77,726	69,591
Live Cattle	2.7%	6.1%	$1,293.2	$1,660.0	$38,620	33,486	42,982	76,468	71,834
Brent Crude Oil	14.5%	0.0%	$6,901.3	$0.0	$64,900	106,337	0	106,337	
WTI Crude Oil	31.3%	12.8%	$14,888.0	$3,482.0	$66,310	224,521	52,516	277,036	
Gasoil	3.1%	0.0%	$1,472.7	$0.0	$54,725	26,911	0	26,911	
Heating Oil	8.0%	3.8%	$3,823.7	$1,048.0	$75,243	50,818	13,924	64,742	
Gasoline	7.9%	4.1%	$3,780.5	$1,105.0	$76,579	49,368	14,424	63,792	
Natural Gas	10.6%	12.3%	$5,030.8	$3,355.0	$91,680	54,873	36,591	91,464	
Aluminum	3.1%	6.9%	$1,464.4	$1,866.0	$59,475	24,621	31,383	56,004	
Lead	0.3%	0.0%	$156.4	$0.0	$31,800	4,918	0	4,918	
Nickel	0.7%	2.7%	$312.8	$724.0	$88,182	3,547	8,214	11,762	
Zinc	0.7%	2.7%	$355.6	$736.0	$51,900	6,852	14,184	21,036	
Copper (LME)	2.8%	0.0%	$1,335.1	$0.0	$116,575	11,453	0	11,453	
Copper (CMX)	0.0%	5.9%	$0.0	$1,602.0	$54,225	0	29,542	29,542	
Gold	1.8%	6.2%	$875.9	$1,694.0	$55,430	15,802	30,568	46,370	
Silver	0.2%	2.0%	$99.2	$545.0	$45,100	2,201	12,080	14,280	
TOTAL	100%	100%	$47,613	$27,240					

Source: Standard & Poor's, Dow Jones, Bloomberg Data

Step Two - Calculate Position Size For Other Commodities

If $47.6 billion is used as an estimate for the S&P-GSCI and then $27.2 billion is used for the DJ-AIG it is possible to calculate (using the formulas above) Index Speculators positions in all the other commodities. The table above shows the results.

Step Three - Compare With Actual CFTC Figures For Accuracy

The final column in the table shows the actual figures released by the CFTC. As you can see in almost all cases the estimates generated using this method yield results that are less than the actual reported results. That increases one's confidence that this method is in fact conservative.

Final Note

This method of calculating Index Speculators is almost identical to the methods used by Philip Verleger (www.pkverlegerllc.com), Steve Briese (www.commitmentsoftraders.org) and others. It is not clear who deserves the credit for developing it but it clearly is not us.

ENDNOTES

[1] "Reserve Management, The Commodity Bubble, The Metals Manipulation, The Contagion Risk To Gold And The Threat Of The Great Hedge Fund Unwind To Spread Product." Frank Veneroso, July 19, 2007, pp. 5-6. http://www.venerosoassociates.net/Reserve%20Management%20Parts%20I%20andII%20WBP%20Public%2071907.pdf

[2] http://hsgac.senate.gov/public/index.cfm?fuseaction=Hearings.Detail&HearingID=dc7368c2-0ea1-4151-9fc5-06317a5bba79

[3]

Commodities Futures Markets Open Interest

2008	LONG / DEMAND SIDE		
	Physical Hedger	Traditional Speculator	Index Speculator
COCOA	33%	48%	19%
COFFEE	26%	35%	39%
CORN	41%	24%	35%
COTTON	32%	27%	41%
SOYBEAN OIL	46%	22%	32%
SOYBEANS	30%	28%	42%
SUGAR	38%	19%	43%
WHEAT	17%	20%	64%
WHEAT KC	37%	32%	31%
FEED CATTLE	17%	53%	30%
LEAN HOGS	18%	20%	63%
LIVE CATTLE	13%	24%	63%
WTI CRUDE OIL	59%	10%	31%
HEATING OIL	37%	16%	47%
GASOLINE	41%	20%	39%
NATURAL GAS	62%	10%	28%
GOLD	22%	55%	23%
SILVER	27%	46%	28%
AVERAGE	33%	27%	39%

Source: CFTC Commitments of Traders CIT supplement plus calculations

[4] For more information visit:
http://www.djindexes.com/mdsidx/?event=showAigHome for the DJ-AIG or for the S&P-GSCI
http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_gsci/2,3,4,0,0,0,0,0,0,1,1,0,0,0,0,0.html

Index Component Weights

as of March 12, 2008

		S&P-GSCI	DI-AIG	Weighted Average
Agricultural	**Cocoa**	0.2%	0.0%	0.1%
	Coffee	0.6%	2.9%	1.5%
	Corn	3.3%	5.7%	4.2%
	Cotton	0.9%	2.5%	1.5%
	Soybean Oil	0.0%	2.9%	1.1%
	Soybeans	2.2%	7.2%	4.1%
	Sugar	1.0%	3.1%	1.8%
	Wheat	5.3%	5.6%	5.4%
	Wheat KC	1.2%	0.0%	0.8%
Livestock	**Feed Cattle**	0.3%	0.0%	0.2%
	Lean Hogs	0.8%	2.2%	1.4%
	Live Cattle	1.7%	3.9%	2.6%
Energy	**Brent Crude Oil**	13.4%	0.0%	8.3%
	WTI Crude Oil	38.3%	12.9%	28.6%
	Gasoil	5.0%	0.0%	3.1%
	Heating Oil	4.9%	3.8%	4.5%
	Gasoline	4.2%	3.6%	4.0%
	Natural Gas	6.8%	13.1%	9.2%
Base Metals	**Aluminum**	2.5%	7.7%	4.5%
	Lead	0.5%	0.0%	0.3%
	Nickel	0.9%	2.7%	1.6%
	Zinc	0.6%	2.7%	1.4%
	Copper	3.1%	7.3%	4.7%
Precious Metals	**Gold**	1.9%	7.1%	3.9%
	Silver	0.3%	3.0%	1.3%

Source: Standard & Poor's, Dow Jones

[5] "Investing and Trading in the GSCI," Goldman, Sachs & Co., June 1, 2005 and calculations based upon the CFTC Commitments of Traders Report, CIT Supplement, see the Appendix for more information on how to calculate Index Speculators' positions.

[6]

Commodity Futures Price Inreases
March 2003 - March 2008

Agricultural	**Cocoa**	+34%
	Coffee	+167%
	Corn	+134%
	Cotton	+40%
	Soybean Oil	+199%
	Soybeans	+143%
	Sugar	+69%
	Wheat	+314%
	Wheat KC	+276%
Livestock	**Feed Cattle**	+34%
	Lean Hogs	+10%
	Live Cattle	+23%
Energy	**Brent Crude Oil**	+213%
	WTI Crude Oil	+191%
	Gasoil	+192%
	Heating Oil	+192%
	Gasoline	+145%
	Natural Gas	+71%
Base Metals	**Aluminum**	+120%
	Lead	+564%
	Nickel	+282%
	Zinc	+225%
	Copper	+413%
Precious Metals	**Gold**	+183%
	Silver	+331%

Source: Bloomberg Financial Data

[7] The CFTC states on its website that "In many physical commodities (especially agricultural commodities), cash market participants base spot and forward prices on the futures prices that are 'discovered' in the competitive, open auction market of a futures exchange." - "The Economic Purpose of Futures Markets and How They Work," U.S. Commodities Futures Trading Commission, http://www.cftc.gov/educationcenter/economicpurpose.html

As an additional example, when Platts, an energy markets pricing service, surveys crude oil pricing in physical markets around the globe they are receiving bid and offer quotations from market participants expressed as WTI Light Sweet Crude minus a spread. - "Platts Oil Pricing and Market-on-Close Methodology Explained," Platts - a McGraw Hill Company, July 2007. http://www.platts.com/Resources/whitepapers/moc.pdf?a=i Note that if and when Platts receive price quotes as Brent Crude or Dubai Crude plus or minus a spread there is still a direct and stable relationship between WTI, Brent and Dubai.

[8] Please remember if demand for oil stays the same then prices will stay the same. If supply is constant then demand has to increase for prices to increase. That is why we examine increases in demand.

Increase In Chinese Demand For Petroleum
Last 5 Years

	CONSUMPTION (Barrels Per Year)	**YEAR OVER YEAR CHANGE**
2002	1,883,660,777	
2003	2,036,010,338	152,349,561
2004	2,349,681,577	313,671,240
2005	2,452,800,000	103,118,423
2006	2,654,750,989	201,950,989
2007	2,803,010,200	148,259,211
	TOTAL CHANGE	919,349,423

Source: Energy Information Association, US Department of Energy

[9] This table takes the numbers from the main table in the body of the statement and converts them to their barrel equivalents. The Petroleum consumption numbers that the DOE provides for Chinese consumption include all forms of petroleum both crude and refined.

Increase In Index Speculator
Demand For Petroleum
Last 5 Years

Petroleum Product	**Barrels**
WTI Crude Oil	538,499,579
Brent Crude Oil	144,524,265
Gasoil	44,122,619
Heating Oil	61,164,897
Gasoline	59,249,015
TOTAL CHANGE	847,560,374

[10] Energy Information Association - U.S. Department Of Energy. http://tonto.eia.doe.gov/dnav/pet/pet_stoc_wstk_dcu_nus_a.htm

[11] "The End Of Cheap Food," The Economist, December 6, 2007 http://www.economist.com/research/articlesBySubject/displaystory.cfm?subjectid=7216688&story_id=10252015

[12] "Ethanol Reshapes the Corn Market," Economic Research Service - U.S. Department Of Agriculture, Allen Baker and Steven Zahniser April 2006. http://www.ers.usda.gov/AmberWaves/April06/Features/Ethanol.htm

[13] "Ethanol Production Could Be Eco-Disaster, Brazil's Critics Say," Kelly Hearn, National Geographic News, February 8, 2007, http://news.nationalgeographic.com/news/2007/02/070208-ethanol.html

[14] Economic Research Service, U.S. Department of Agriculture, http://www.ers.usda.gov/Briefing/Wheat/consumption.htm

[15] see endnote #2

[16] Because the base metals are traded on the London Metals Exchange, Bloomberg did not have open interest data prior to 2005. Since prices and open interest expressed in contracts have been rising steadily the last five years we took 2005's base metal data and added it to 2004 actual numbers to come up with a conservative estimate for 2004 open interest. These are daily numbers averaged across the entire year.

Average Daily Dollar Value Of Open Interest

(in millions)	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
COCOA	$ 1,815	$ 1,510	$ 1,569	$ 1,883	$ 2,040	$ 2,690	$ 4,062
COFFEE	$ 1,408	$ 1,693	$ 2,748	$ 3,769	$ 4,203	$ 6,308	$ 9,521
CORN	$ 5,435	$ 5,118	$ 8,182	$ 7,657	$ 15,059	$ 23,763	$ 37,427
COTTON	$ 1,646	$ 2,990	$ 2,645	$ 2,841	$ 4,259	$ 6,822	$ 11,689
SOYBEAN OIL	$ 1,441	$ 1,952	$ 2,456	$ 1,944	$ 3,186	$ 5,756	$ 8,868
SOYBEANS	$ 4,883	$ 7,306	$ 9,480	$ 8,846	$ 10,129	$ 20,882	$ 37,399
SUGAR	$ 1,521	$ 1,712	$ 2,772	$ 5,120	$ 8,634	$ 8,174	$ 15,509
WHEAT	$ 1,836	$ 1,862	$ 2,647	$ 3,827	$ 7,414	$ 11,608	$ 19,742
WHEAT KC	$ 1,304	$ 1,081	$ 1,240	$ 1,525	$ 3,099	$ 4,094	$ 6,253
FEED CATTLE	$ 540	$ 757	$ 804	$ 1,298	$ 1,518	$ 1,409	$ 1,818
LEAN HOGS	$ 602	$ 858	$ 1,873	$ 2,309	$ 3,285	$ 3,875	$ 4,465
LIVE CATTLE	$ 2,670	$ 3,595	$ 3,556	$ 4,859	$ 6,701	$ 7,909	$ 8,764
BRENT CRUDE	$ 6,556	$ 8,486	$ 12,620	$ 19,388	$ 31,094	$ 45,653	$ 52,832
WTI CRUDE	$ 16,052	$ 20,400	$ 33,620	$ 55,297	$ 80,996	$ 130,699	$ 199,970
GASOIL	$ 3,990	$ 3,695	$ 5,461	$ 10,196	$ 14,749	$ 21,006	$ 22,917
HEATING OIL	$ 4,412	$ 5,105	$ 8,242	$ 11,838	$ 13,575	$ 17,903	$ 23,854
GASOLINE	$ 3,714	$ 3,947	$ 7,304	$ 10,276	$ 11,366	$ 16,085	$ 24,213
NATURAL GAS	$ 23,551	$ 27,812	$ 25,897	$ 42,427	$ 45,067	$ 54,075	$ 72,834
ALUMINUM	$ 0	$ 0	$ 0	$ 12,286	$ 23,676	$ 27,589	$ 32,741
LEAD	$ 0	$ 0	$ 0	$ 677	$ 981	$ 2,226	$ 2,134
NICKEL	$ 0	$ 0	$ 0	$ 1,986	$ 4,415	$ 6,690	$ 6,608
ZINC	$ 0	$ 0	$ 0	$ 2,696	$ 6,759	$ 6,917	$ 6,428
COPPER	$ 0	$ 0	$ 0	$ 11,864	$ 26,516	$ 28,921	$ 32,717
GOLD	$ 5,639	$ 9,851	$ 13,221	$ 13,860	$ 18,929	$ 24,891	$ 43,700
SILVER	$ 1,976	$ 2,438	$ 3,745	$ 4,286	$ 6,447	$ 7,437	$ 12,935
TOTAL	**$ 90,991**	**$ 112,168**	**$ 150,082**	**$ 242,955**	**$ 354,097**	**$ 493,382**	**$ 699,400**

Source: CFTC Commitment of Traders and Bloomberg. Delta-equivalent options positions are included but spread positions are omitted. For Base Metals, Brent Crude and Gasoil open interest represents futures only. No data for Base Metals in 2002-2004.

[17] CIA World Factbook. https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html#Econ

[18] There is no publicly available data that shows inflow data for commodity indexation trading strategies but some approximations can be made. The end of year "investment" figures are published by the respective index companies (or they can be calculated) and the annual performance is known. Therefore the amount that the prior year's investment has grown or shrunk can be calculated. Then the difference in the yearly change has to come from net inflows. When during the year the inflows occurred is not known, so the assumption is made that all net inflows occurred evenly throughout the year. Changing assumptions on net inflow timing only affects the rate of growth for that year's inflow which never amounts to more than a few billion dollars difference.

Estimated Annual Inflows

	S&P-GSCI	DJ-AIG	TOTAL
2004	$16.2	$8.9	$25.1
2005	$4.8	$12.4	$17.2
2006	$28.3	$11.3	$39.6
2007	$14.7	$15.4	$30.1
2008	$35.1	$20.0	$55.1
TOTAL	$99.1	$68.0	$167.1

[19] ibid.

[20] This table is a good reference in comparing the differences between market participants.

Types Of Futures Market Participants

HEDGER	INDEX SPECULATOR	TRADITIONAL SPECULATOR
Sheds Price Risk	**Takes On Price Risk**	**Takes On Price Risk**
Hedges Underlying Position	**Profits From Price Moves**	**Profits From Price Moves**
Consumes Liquidity	**Consumes Liquidity**	**Provides Liquidity**
Price Sensitive	**Insensitive To Price**	**Price Sensitive**
Take Long And Short Positions	**Long Only**	**Take Long And Short Positions**

[21] "And that actually happened in 1991 with a particular swap dealer that was hedging an OTC transaction with a pension fund, and the swap dealer came to us, and we said, "yeah, that qualifies for a hedge exemption," so we granted a hedge exemption to the swap dealer. And in the years since then, we've done the same for other swap dealers, as well."
(Remarks of Don Heitman, Division of Market Oversight, CFTC Agricultural Advisory Committee Meeting, Washington, D.C., December 6, 2007)
(www.cftc.gov/stellent/groups/public/@aboutcftc/documents/file/aac_12062007.pdf)

[22] "Commodities: Who's Behind the Boom?," Gene Epstein, Barron's, March 31, 2008

[23] "Similar hedge exemptions were subsequently granted in other cases where the futures positions clearly offset risks related to swaps or similar OTC positions involving both individual commodities and commodity indexes. These nontraditional hedges were all subject to specific limitations to protect the marketplace from potential ill effects. The limitations included: (1) The futures positions must offset specific price risk; (2) the dollar value of the futures positions would be no greater than the dollar value of the underlying risk; and (3) the futures positions would not be carried into the spot month."
(72 FR 66097, Notice of Proposed Rulemaking, Risk Management Exemption From Federal Speculative Position Limits, , November 27, 2007.)
(http://www.cftc.gov/stellent/groups/public/@lrfederalregister/documents/file/e7-22992a.pdf)
(The language in 72 FR 66097 above also appears in 71 FR 35627, CFTC Request for Comments, Comprehensive Review of the Commitments of Traders Reporting Program, June 21, 2006.)
(http://www.cftc.gov/foia/fedreg06/foi060621a.htm)

[24] (72 FR 66097, Notice of Proposed Rulemaking, Risk Management Exemption From Federal Speculative Position Limits, , November 27, 2007.)
(http://www.cftc.gov/stellent/groups/public/@lrfederalregister/documents/file/e7-22992a.pdf)

[25] "CFTC Study Finds Independent-Moving Commodity and Equity Markets," December 19, 2007, http://www.cftc.gov/newsroom/generalpressreleases/2007/pr5425-07.html
http://www.cftc.gov/stellent/groups/public/@aboutcftc/documents/file/amarketofone.pdf

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THE WALL STREET JOURNAL. ONLINE

June 19, 2008

Lifting Ban Wouldn't Be Immediate Fix for Oil

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Output Could Be Seven Years Away; A Vast Unknown

By BEN CASSELMAN

June 19, 2008; Page A6

As politicians debate whether to open federal offshore waters to oil and natural-gas drilling, there is agreement on at least one point: It isn't a short-term fix.

If the bans were lifted tomorrow, it would be at least seven years -- and likely as long as a decade -- before the first oil began to flow off the coasts of Florida, California and the eastern seaboard.

Workers clean up Santa Barbara Harbor, Calif., in 1969 after oil leaking from an offshore well covered local beaches.

"Is it going to happen overnight? No," said Dan Naatz, vice president of the Independent Petroleum Association of America. "Is it going to solve all of our nation's energy problems? No."

President Bush's call Wednesday for Congress to lift its longstanding moratorium on offshore drilling was a bid to address consumer anger over soaring electricity and gasoline bills ahead of the fall elections. Republicans claim that Democrats' opposition to expanded drilling is restricting energy supplies when the nation needs them most, amid a run-up in crude-oil prices to more than $135 a barrel. Democrats counter that opening the federal waters to the oil industry could do irreparable environmental and economic harm to sensitive coastal areas, while failing to lower prices for consumers.

Underlying the argument is a vast unknown: With the disputed areas long off-limits even to exploration, neither government nor industry experts know exactly how much oil and gas is there, how best to get at it, or even where it is. And although the industry's environmental record is much improved since headline-grabbing oil spills of earlier eras, risks remain, and addressing those risks could delay production for years.

Nonetheless, the industry has for years coveted the potential energy reservoirs hidden beneath federal waters. By broad government calculations, there are 86 billion barrels of oil in offshore waters, with about 18 billion barrels of that located in areas now off-limits. The greatest prize based on sheer volume is believed to be in the waters off the coast of Southern California, which is estimated to hold 5.6 billion barrels of oil and 10 trillion cubic feet of natural gas. The eastern and central Gulf of Mexico are believed to hold 3.7 billion barrels of oil and 21.5 trillion cubic feet of gas. Experts believe there are smaller caches off the Atlantic seaboard and further up the Pacific coast.

If the moratoriums were lifted -- a far-from-certain prospect with Democrats controlling Congress -- the industry's attention likely would turn first to the eastern Gulf of Mexico. That is partly from political expediency; Tuesday, Florida Gov. Charlie Crist reversed his earlier position to endorse drilling off his state's coast, something most other coastal governors oppose.

Beyond the politics, the industry is eager for access to the eastern Gulf because it is one of the surer bets for relatively easy, cheap-to-produce oil and gas. A quarter of current U.S. oil production each year -- close to half a billion barrels -- comes out of the central and western Gulf of Mexico, where drilling is allowed. Much of the roughly 3.7 billion barrels of oil believed to reside in the eastern Gulf is in relatively shallow water that is readily accessible using current drilling technology.

But even there, the U.S. Minerals Management Service, which oversees the offshore oil industry, estimates it would take at least two years from the day the moratorium was lifted for the government to conduct environmental and economic reviews prior to its first lease sale. Recent history suggests it would take at least five more years for the winning bidders to explore, drill wells, build production platforms and lay pipelines so that commercial production could begin.

Environmental battles -- likely given the strong opposition from many environmental groups -- could delay the projects for years more. Already, critics of offshore drilling are preparing for a fight. At stake, said Holly Binns, field director for Environment Florida, "are what are considered the best beaches in the world."

If the Gulf of Mexico poses challenges, other coastal areas could be even more difficult. On the Atlantic coast, oil-reserve estimates are so out of date that the Minerals Management Service has had to draw on well data from Nova Scotia and North Africa -- which eons ago bordered North America -- to estimate reserves. "We're really emphasizing the word 'estimate,'" said Chris Oynes, who oversees the Minerals Management Service's offshore program.

With so much uncertainty, the industry likely would spend years exploring before deciding where to drill.

Federal waters along Southern California already produce some oil -- about 26 million barrels per year -- from platforms built before the moratorium went into effect in the 1970s. That means some of the pipelines and infrastructure needed for production are already in place, and the industry already knows at least something about the geology of the area.

But California's offshore legacy includes a devastating 1969 oil spill off the coast of Santa Barbara, when a well blew out and dumped at least 80,000 barrels of crude oil across more than 40 miles of coastline. The accident led directly to the moratorium on further drilling there, and remains a touchstone for drilling opponents.

The industry claims it has cleaned up its act. Oil rigs now have automated systems to prevent blowouts like the one in Santa Barbara, and wells can be quickly shut down from shore to limit spillage. Pipelines, too, are tracked remotely and have automatic shut-off mechanisms to prevent major spills.

Mr. Oynes, of the Minerals Management Service, points to the limited devastation wrought by Hurricanes Katrina and Rita in 2005 as an industry success story. The storms battered production platforms, tore drilling rigs from their moorings and tangled pipelines, but only about 13,000 barrels of crude oil was spilled into the water -- slight by industry standards.

Environmental groups remain skeptical. Further drilling in hurricane-prone areas, they say, only risks further spills. Those objections could delay production in these regions long after the moratoriums are lifted.

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June 19, 2008

Republicans Ramp Up Energy Debate in Push For Offshore Drilling

By JOHN D. MCKINNON and STEPHEN POWER
June 19, 2008

WASHINGTON -- Republicans positioned themselves for an election-year battle with Democrats on the issue of high gasoline prices as President Bush lined up with John McCain to push for oil drilling off the U.S. coast and in other environmentally sensitive areas, such as oil-shale regions in the U.S. West.

In a move that was carefully coordinated among the White House, Sen. McCain's presidential campaign and leading Republican lawmakers, the president sharply criticized the Democrat-run Congress for blocking the administration's past proposals to boost domestic oil production.

With gas prices still rising, President Bush says it's time for Congress to end a ban on offshore drilling. Video courtesy of Fox News.

In the process, Mr. Bush laid the groundwork for the broadest election-year energy-policy debate in a generation. Republicans are appealing to voters with calls to open new areas of the country to drilling and exploration. Democrats are focused on curbing speculation and slapping a windfall-profits tax on oil companies to finance alternative-energy sources.

In a Rose Garden appearance, Mr. Bush framed the issue starkly: "If congressional leaders leave for the Fourth of July recess without taking action, they will need to explain why $4-a-gallon gasoline is not enough incentive for them to act."

The new White House plan puts more emphasis than past proposals on oil-shale production. The White House argues that shale could produce 800 billion barrels of oil. Many Democrats in the western states say oil-shale technology requires more water than the region has available, and some independent energy experts say the technology used to develop the

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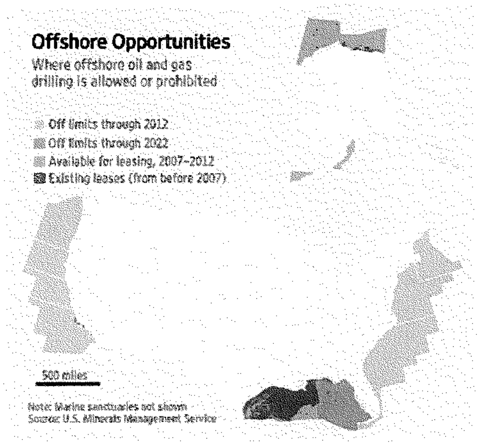
resource would require large amounts of energy from new coal-fired power plants.

Leading Democrats immediately rejected the White House plan, which largely tracks Sen. McCain's proposals for expanding production. In addition to pressing for more energy conservation, Democrats suggested they will focus more of their political energy on blaming high prices on oil companies and oil-producing countries -- and casting Republicans as their obedient servants. Democrats also have focused attention on market speculation.

Senate Majority Leader Harry Reid of Nevada accused Mr. Bush and Sen. McCain of staging a "cynical campaign ploy." Sen. Barack Obama, the likely Democratic presidential nominee, also rejected lifting the drilling moratorium.

"This is not something that's going to give consumers short-term relief, and it is not a long-term solution to our problems," Sen. Obama said.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Source: U.S. Minerals Management Service

In recent weeks, Democrats have sought to reframe the debate over drilling by arguing that it is possible to increase domestic oil production without opening new lands. They point out that the industry already has access to tens of millions of acres believed to contain oil and gas, but are producing on only about a quarter of that.

More broadly, Democratic leaders argued Wednesday that lifting the ban on offshore drilling would make it more difficult for the U.S. to reduce its reliance on oil and other carbon-intensive fuels.

"It's horrendous energy policy because it takes our focus away from the tough things we need to do," former Florida Sen. Bob Graham told reporters on a conference call organized by the Obama campaign.

One tough measure would be stronger moves toward conservation. Members of both parties have begun to talk about conservation, but few have offered specific ideas on how Americans should change their behavior to conserve oil. Notably absent from the debate are unpopular ideas from the 1970s, such as capping highway speed limits at 55 miles an hour.

Not all Democrats favor a blanket ban on drilling offshore. In Virginia, the Democratic governor, Tim Kaine, has expressed support for allowing exploratory drilling off the state's coast. And some congressional Democrats have pushed for years to relax the current ban to allow drilling for natural gas.

Not all Republicans are in favor of allowing drilling off their state's shores. California's Republican governor, Arnold Schwarzenegger, reaffirmed his opposition to drilling off his state's coast in a statement Wednesday.

It is unlikely that Congress will pass legislation expanding oil production this year. Wednesday, a House committee that had been scheduled to consider a measure to lift the federal offshore-drilling ban canceled its meeting. Democratic officials said the change was needed so lawmakers could focus on an Iraq war spending bill.

Bush pressed congressional Democrats to lift bans on offshore oil drilling, saying "There is no excuse for delay."

The McCain camp, the White House and top Republicans began discussing their energy plans more than a month ago, and quickly decided to emphasize domestic supply.

For Sen. McCain, pushing expanded production -- particularly in politically sensitive areas such as Florida's Gulf coast -- allows him to cast himself as the candidate of change on a big issue, advisers believe.

The White House and the McCain camp had extensive discussions over one area of disagreement: Sen. McCain opposes drilling in a portion of the Arctic National Wildlife Refuge, while Mr. Bush has long advocated it. They finally agreed to disagree, according to people familiar with the situation.

Administration officials also debated whether to lift an executive order that also prohibits offshore drilling, but decided against it, possibly to avoid coordinating too closely with Sen. McCain.

Mr. Bush got a briefing on the plan aboard Air Force One Monday as he traveled home from his trip to Europe. White House aides held a final decision-making meeting with the president Tuesday in the Roosevelt Room.

Administration officials emphasized the decision's economic importance for ordinary Americans, but it also has the backing of oil producers. Last month, **Exxon Mobil** Corp. Chief Executive Rex Tillerson said it was "terribly upside down" that Mr. Bush would lobby Saudi Arabia to boost production even as much of the U.S. remains off limits to domestic drilling.

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June 19, 2008

In Saudi Oil Output Discussions, The Old Clout Will Be Missing

By NEIL KING JR. and MARC CHAMPION
June 19, 2008

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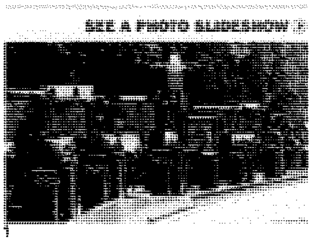
Oil diplomacy used to be the province of a small cast of characters with the muscle to make a difference when prices got out of hand.

When the Iran-Iraq war sent oil prices soaring in the early 1980s, for instance, the U.S. helped cajole Saudi Arabia to widen its spigots and calm the markets. Oil companies in the North Sea and Alaska also came on strong with big supplies, causing a glut that lasted into the 1990s.



Reuters

See photos of World-Wide fuel protests.

But now, with fuel costs again causing pain world-wide, a far more diverse group will take the stage in Saudi Arabia Sunday. Dozens of world leaders and executives are meeting to weigh how to reverse oil prices, which have shot up over 40% this year. Their numbers show how tough finding a remedy is likely to be.

Previous oil shocks were largely the result of wars. This time, crude prices have shot up for many reasons, from an oil-hungry China and a feeble dollar to fears that the world's petroleum supply is running thin. With oil use now more widespread than ever before, the ensuing economic pain is also global, hurting America's airlines, spurring protests across Europe and prompting pleas for financial relief in the poorer reaches of Asia and Latin America.

Saudi Arabia's King Abdullah called the gathering, fearful that oil prices would damage the world economy and permanently curb demand in major economies like the U.S. Nearly everyone at the meeting -- be it oil-producing nations, Big Oil, China or rich countries such as the U.S. -- will arrive hobbled. "No one is going into this meeting with any particular clout or authority," said David Kirsch, an ex-U.S. State Department energy official who is with PFC Energy in Washington.

The player taking the biggest risk is Saudi Arabia. At a pivotal moment, and with its prestige on the line, the de facto leader of the Organization of Petroleum Exporting Countries and long the world's mightiest oil power appears suddenly weakened. Since Friday, Saudi Arabia has tried to set the stage for the Jeddah meeting by promising a boost in oil output to hammer down prices. Instead, prices have held firm.

Benchmark oil closed Wednesday on the New York mercantile Exchange up $2.67 at $136.68.

If Saudi Arabia's bid to drive down prices falls short, analysts say, the credibility of the OPEC cartel -- responsible for nearly 40% of the world's daily oil ouput -- will also take a hit. But some OPEC countries, particularly Iran, have spoken out against the Saudi push to unilaterally raise output, saying that such a decision should be left to the group and that the market doesn't need additional supplies.

U.S. officials will arrive with a few proposals to clarify and perhaps mend the rampant financial trading in oil futures, which some have blamed for the recent surge in prices. But aides to President Bush say it will take years for longer-term fixes to make a dent in demand in the U.S., which consumes every fourth barrel of oil produced in the world. These include more nuclear power, more offshore drilling, electric cars or wiser urban planning.

If anything, the administration appears largely baffled by what might come of the one-day Jeddah conference. Energy Secretary Samuel Bodman, who will represent the U.S., told Bloomberg TV on Wednesday that he had "no specifics about what our expectations might be" heading into the summit.

From Europe, leaders such as Britain's prime minister, Gordon Brown, find themselves squeezed between increasingly angry electorates and spending constraints forced on them by their slowing economies. That tension will he on display Thursday and Friday as leaders of the European Union hold a summit in Brussels likely to be dominated by energy matters.

European drivers have long been inured to high fuel-pump prices, more than two thirds of which are made up of taxes. But with fuel now costing above $9 a gallon, truckers and fishermen have been clogging Europe's ports and roads with protests.

The summits in Brussels and Jeddah are unlikely to provide any sweeping, short-term solutions for Europe, because EU countries disagree sharply about the root causes of the run-up in fuel prices. Almost every country is trying to attack the problem in different ways.

Austria has proposed a European Union-wide tax on what it calls oil speculators. French President Nicolas Sarkozy has proposed cutting the sales tax on fuel across the EU. These measures would require unanimous agreement from all 27 countries. U.K. officials say Mr. Brown, for one, is unlikely to agree. He is pressing for more dialogue with producer nations and more focus on energy efficiency to cut consumption, a UK official said Tuesday.

Italy's government, faced with a threatened transport strike later this month, on Wednesday approved a slate of measures to lower fuel prices. These include cuts in road and fuel taxes, as well as rise in the corporate tax rate for oil companies that do business in Italy to 33% from 27%. The government says this and a tax on companies such as Eni SpA will be transferred to low-income households.

Mr. Brown is under pressure over fuel prices at home, after truckers caused chaos in central London earlier this month and a fuel-delivery strike led to shortages in some parts of the country.

The European drama over fuel prices heated up Wednesday as farmers drove hundreds of tractors into central Brussels ahead of the EU leaders' summit meeting. "Diesel prices have doubled, feed prices are up. They [the governments] have to do something so we can survive," said Marc Delvigne, a 39-year-old cattle farmer from eastern Belgium.

--Guy Chazan in London and Luca Di Leo in Rome contributed to this article.

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June 19, 2008 Thursday
Suburban Edition

Wall Street Lobbies to Protect Speculative Oil Trades

BYLINE: Jeffrey H. Birnbaum; Washington Post Staff Writer

SECTION: FINANCIAL; Pg. D01

LENGTH: 1042 words

Wall Street banks and other large financial institutions have begun putting intense pressure on Congress to hold off on legislation that would curtail their highly profitable trading in oil contracts -- an activity increasingly blamed by lawmakers for driving up prices to record levels.

Representatives of Goldman Sachs and Morgan Stanley, along with the trade associations for hedge funds and other financial groups, have lobbied the offices of key legislators, briefed senior staffers on committees that oversee pivotal parts of the **energy** markets and distributed research materials explaining their view about oil and how it's traded.

In a pair of lengthy and sometimes testy closed-door sessions in the Senate last week, executives from Goldman Sachs and Morgan Stanley, two of Wall Street's largest investment banks, made the case that their multibillion-dollar investments in **energy** contracts have not led to higher oil prices. Rather, they told Democratic staff members of the **Energy** and Natural Resources Committee that the trades allow international markets to operate efficiently and that the run-up in oil prices results not from speculation but from actual imbalances of supply and demand.

But the executives were met with skepticism and occasional hostility. "Spare us your lecture about supply and demand," one of the Democratic aides said, abruptly cutting off one of the executives, according to a staff member in the room.

Another aide at the meetings warned the executives that no matter what arguments they muster, it would be hard to prevent Congress from acting. Referring to a vote earlier this year to impose new mileage standards on automobile makers, the aide said, "At 90 bucks a barrel, Congress rolled the autos for the first time in 30 years -- is it too much to think that Congress will impose more restrictions on you if oil goes to $150 dollars a barrel?"

Goldman and Morgan declined to comment about the meetings.

Separately, lobbyists for the International Swaps and Derivatives Association (ISDA) and other financial entities such as hedge funds roamed through congressional office buildings this month and, in the Senate, left behind short policy statements that defended the current state of regulation. "Blaming speculation for the increase in **energy** prices is to confuse causation and correlation," one of the documents said.

A second document, or "talker," asserted: "Congress and regulators have acted to strengthen oversight of the **energy** markets. Give the new authorities time to work."

But time is running short. The Commodity Futures Trading Commission, the federal agency that regulates oil trading, has drawn the increasing ire of lawmakers for exempting financial firms from rules that limit speculative buying, a prerogative usually reserved for airlines and trucking companies that need to lock in future fuel costs. The CFTC has also waived regulations on U.S. investors who trade commodities on some overseas markets, allowing them to accumulate large quantities of the future oil supply by making purchases on lightly regulated foreign exchanges.

Under pressure from lawmakers, the CFTC and its British counterpart agreed Tuesday to impose new limits on the trading of the United States' benchmark oil contract on a London exchange. Such trading of West Texas intermediate oil contracts has been occurring beyond the purview of U.S. regulators on the London platform, the Intercontinental Exchange.

The move did not go far enough to satisfy some Democrats who criticized the CFTC for abdicating the job of policing overseas oil traders to the Intercontinental Exchange.

Until recently, Congress had been reluctant to intervene in the **energy** futures markets, and the lobbying by financial entities has been a major reason. "We have known since 2001 that there were problems here, but we've run up against people on Wall Street who don't want to be helpful in policing the market," said Sen. Maria Cantwell (D-Wash.), one of several lawmakers frustrated by the effectiveness of the financial lobby.

A growing number of members of Congress have reacted to public outrage over skyrocketing gasoline prices by introducing at least eight bills that restrict the ability of financial companies to buy futures contracts, disclose more about those investments or stiffen federal oversight of **energy** trades. Other legislation is in the works, congressional aides said.

Democratic lawmakers have been particularly outspoken. "There is a bubble of speculation on the oil commodity exchange that is also driving up the price of gas, and that has to stop," said Sen. Byron L. Dorgan (N.D.), a leader on the issue.

But some Republican lawmakers are also pressing for change. "At a time when American people cannot escape the direct impact that rising gas and oil prices have on their day-to-day lives, it is incumbent that we ensure that our **energy** futures markets are transparent and demonstrate supply and demand -- not manipulation by large institutional investors," said Sen. Olympia J. Snowe (Maine).

What's more, the ramped-up lobbying by financial services firms has provoked a counterattack by lobbyists eager for additional regulation of **energy** trading. Led by the Air Transport Association, the lobby for the airline industry, a newly formed coalition of **energy** users -- which includes truckers, farmers and consumer groups -- has been urging lawmakers to approve several bills that would limit speculative investments in **energy**.

But advocates for the financial industry insist these concerns are misplaced.

"Increasing regulation on what we do will not lower **energy** prices," said Greg Zerzan, head of global public policy for ISDA. The association, which represents all aspects of the multibillion-dollar practice of trading exotic financial contracts outside of formal exchanges, hosts a conference call every Friday in Washington to coordinate the activities of like-minded groups.

Its latest addition: the Financial Services Roundtable, the lobby for 100 of the nation's largest financial services companies. And now the Roundtable and ISDA are courting the nation's largest business federation, the U.S. Chamber of Commerce, to join their crusade. Chamber executives said they were seriously considering the alliance.

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June 19, 2008 Thursday
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Gas Prices Energizing Va. Senate Race; Warner Offers Proposals, Disputes Gilmore on Drilling

BYLINE: Tim Craig; Washington Post Staff Writer

SECTION: METRO; Pg. B01

LENGTH: 765 words

DATELINE: RICHMOND, June 18

Senate candidate Mark R. Warner said Wednesday that the U.S. government needs to get tougher with OPEC and better regulate investors speculating in the oil market to drive down gas prices.

Warner (D) unveiled his **energy** policy the same day that President Bush called for Congress to remove the federal ban on offshore drilling, including areas off the Virginia coastline. Warner said he supports offshore exploration for oil and **natural gas** but stopped short of endorsing drilling, expressing environmental concerns and saying it would have no immediate impact on gas prices.

With those prices exceeding $4 a gallon, offshore drilling is emerging as a major issue in the U.S. Senate race and next week's battle in the General Assembly over transportation funding.

"We could drill everywhere from here to New Jersey, and it's still years away and will only add about 140 days of oil supply to this country," said Warner, a former governor.

His GOP opponent, James S. Gilmore III, has made drilling in the Arctic National Wildlife Refuge and off the East Coast, including Virginia, a central focus of his campaign, casting it as the only plausible solution for reducing the price of gas.

"I think the number one challenge for the national security as well as the pocketbooks of regular men and women out there is this challenge we are facing with gas prices," Gilmore, also a former governor, said in a speech this week. "If we are going to increase the supply of oil, then we've got to drill for oil in the United States."

Warner hit back at Gilmore on Wednesday, calling his solution shortsighted and unrealistic. Warner instead unveiled a multifaceted proposal that seeks to reduce the U.S. reliance on oil.

"The Bush-Cheney **energy** policies not only sound like they were written by Big Oil, they were written by Big Oil, and we are paying at the pumps," Warner said in a speech at the Science Museum of Virginia in Richmond. "My opponent in this race, who was the biggest proponent of sound-bite solutions, is now advocating the continuation of those very policies right now. I hope this becomes one of the defining issues of this Senate race."

At the state Capitol, however, some legislators are eying the revenue that would be generated by offshore drilling.

Sen. Frank W. Wagner (R-Virginia Beach), an ocean engineer, said Virginia would receive $200 million in royalties from companies granted rights to drill for **natural gas** or oil.

"This could provide Virginia with substantial new revenues that doesn't cost us anything," said Wagner, who has drafted a bill that would divert 40 percent of the proceeds to transportation. "We have the potential in Virginia to play a real leadership role."

Delacey Skinner, a spokeswoman for Gov. Timothy M. Kaine (D), said Kaine supports exploration for **natural gas** -- but not oil -- 50 miles or more offshore to "see what's out there." But Skinner said such efforts should not be linked to transportation.

"The transportation challenges that we face in terms of the shortfall are very clear and very urgent," Skinner said. "Any revenue that could potentially be generated by offshore drilling is probably going to take years to come by."

Warner noted that the United States contains 2 percent of the world's oil supply but uses 25 percent of it. He rejected calls to drill for oil in the Arctic reserve.

Warner instead proposed a series of policies that he said would reduce the price of oil in the short term and the long term. He wants U.S. pressure on the Organization of the Petroleum Exporting Countries to increase production, and more power for the attorney general to go after speculators in the United States and abroad who have manipulated the oil market.

He wants to stiffen regulations and roll back tax breaks for oil companies, make it cheaper to purchase a hybrid vehicle, raise fuel-efficiency standards on automobiles, limit the emissions of carbon dioxide and bolster investments in nuclear, solar and wind **energy** sources.

He also vowed to push for policies that promote technology that makes it easier to burn coal in an environmentally friendly way.

"My opponent's only solution is drill here, drill now," Warner said.

Gilmore accused Warner of "saying the same things that everyone else in Washington has said for the last 20 years."

"That is how we got where we are," Gilmore said in a statement. "We need to drill here and drill now. . . . . Working families are hurting now and it is time for a common sense solution to the problems of supply and demand, not the same liberal theories that have restricted America's **energy** supply for decades."

LOAD-DATE: June 19, 2008

89 of 99 DOCUMENTS

The Washington Post
washingtonpost.com
The Washington Post

June 19, 2008 Thursday
Met 2 Edition

Bush Calls for Offshore Oil Drilling; President Joins McCain in Seeking to Lift Long-Standing Ban

BYLINE: Michael Abramowitz and Juliet Eilperin; Washington Post Staff Writers

SECTION: A-SECTION; Pg. A01

LENGTH: 1187 words

President Bush called yesterday for lifting the 27-year-old ban on U.S. offshore oil drilling, joining Sen. John McCain in endorsing an idea that Republicans hope will gain traction in Congress and on the campaign trail as the price of gasoline soars.

In a Rose Garden appearance, the president challenged Democrats to drop their "obstruction" of proposals to expand domestic **energy** production. "Americans will rightly ask how . . . high gas prices have to rise before the Democratic-controlled Congress will do something about it," he said.

Democratic leaders in Congress said the plan is going nowhere. "President Bush and John McCain are not serious about addressing gas prices," said Senate Majority Leader Harry M. Reid (Nev.). "If they were, they would stop offering the same old ideas meant to pad the pockets of Big Oil and work with Democrats to reduce our dependence on oil."

On Monday, McCain (Ariz.) called for lifting the ban, reversing an earlier position and angering environmentalists whom he has sought to appeal to in his presidential campaign. Bush's announcement puts the weight of the White House behind the idea, but it also gives Democrats another opportunity to link the presumptive GOP nominee to the unpopular president.

"McCain's capitulation to Big Oil could hurt him among independents and Clinton supporters, particularly in communities that depend on a clean ocean and beaches for their jobs and small businesses," said Daniel J. Weiss, an analyst at the liberal Center for American Progress Action Fund, referring to voters who backed Sen. Hillary Rodham Clinton in her unsuccessful Democratic primary campaign against Sen. Barack Obama. "Bush's announcement of support today makes it clearer that Senator McCain is running for Bush's third term."

But Republicans are taking heart in recent polling that suggests the public may be more receptive to drilling, especially if it is coupled with other initiatives to address gas prices. A recent Gallup poll showed that 57 percent of respondents were willing to support drilling in the nation's coastal and wilderness areas currently closed to exploration.

"When drivers are paying $4 for a gallon of gas and there's the perception that the economy's going to hell in a handbasket, voter attitudes regarding offshore drilling can change pretty quickly," said GOP pollster Neil Newhouse. "All of our evidence indicates that's exactly what's happened."

This view appears to be fueling the separate announcements from Bush and McCain this week that they want Congress to abandon its moratorium on offshore drilling. Bush has spoken favorably of drilling in the Gulf of Mexico before, but yesterday was the first time he indicated that he would rescind an executive branch order banning all offshore drilling if Congress removed its own long-standing prohibitions.

The moratorium was imposed in 1981, when lawmakers from coastal states sought to block leasing off the Massachusetts and California coasts. Congress has approved the moratorium every year since. President George H.W. Bush issued a separate executive order banning offshore oil drilling in 1991. That prohibition was initially slated to expire in 2002, but in 1998 President Bill Clinton extended it to 2012.

During his appearance yesterday, Bush again urged Congress to open the Arctic National Wildlife Refuge in Alaska for oil drilling and to ease the regulatory obstacles to expanding refining capacity. McCain remains opposed to drilling in the refuge.

The president also called for ending a ban on oil shale drilling in the Rocky Mountain states, a move he said might open access to about 800 billion barrels of recoverable oil, or three times the reserves of Saudi Arabia. It has been considered too costly to develop those reserves, but Bush said the economic "calculus is changing."

Much of this agenda will prove controversial, especially in politically influential coastal states such as Florida and California, whose GOP governors diverge on the wisdom of drilling. Florida Gov. Charlie Crist, a key McCain ally, reversed his position this week and said he favors lifting the federal ban, giving states the option of drilling, while California Gov. Arnold Schwarzenegger yesterday restated his opposition to drilling off the state's coastline.

Keith Hennessy, director of the White House National Economic Council, said that under the president's plan, individual states would retain veto power. "Florida, like every other state, would be able to make those determinations about what they thought is appropriate," he said.

Richard Charter, a consultant for the Defenders of Wildlife Action Fund, said environmental and business groups have found common cause on the issue because pristine beaches generate so much tourism income.

"Offshore oil drilling results in the routine discharges of highly toxic metals, hydrocarbons and other substances," Charter said, adding that the toxins build up over time in marine life. Since the methods for cleaning oil spills have not advanced since the 1950s, he said, "it is counterintuitive" for a coastal politician to take actions that "could jeopardize your coastal economy."

But administration officials and others asserted that technology for preventing oil spills has improved and that drilling can be done safely. "Offshore leasing will not be popular in coastal states, but it will be very popular with consumers as a whole," said J. Robinson West, a leading **energy** consultant in Washington. "This is an eminently logical thing to do. Oil exploration is an industrialized process, but environmentally now it is very safe."

A major uncertainty is the economic impact of offshore drilling, which by Bush's estimate could result in an extra 18 billion barrels of oil -- equivalent to the nation's current oil production for the next 10 years, according to the White House. Hennessy said he thinks that oil prices might fall as markets began building in the expectation of a growing supply. "We would expect it to have an effect on the price; it's very difficult to quantify," he said.

But the federal **Energy** Information Administration estimated that if leasing began in 2012, "access to the Pacific, Atlantic and eastern Gulf regions would not have a significant impact on domestic crude oil and **natural gas** production or prices before 2030."

Hari Sevugan, a spokesman for Obama, the presumptive Democratic presidential nominee, dismissed the proposal, saying that "just as he did with his gas tax holiday gimmick, it's clear that instead of straight talk or tough talk, John McCain is offering nothing more than the same Washington double talk and old ideas that have failed our families for too long."

McCain spokesman Tucker Bounds said the campaign is confident that the senator's proposal will resonate with Americans anxious about rising fuel costs.

"I think Senator Obama finds himself in a very precarious position, because this is John McCain's action versus Barack Obama's inaction," Bounds said. "This ultimately comes down to John McCain making a decision that we need to pursue policies that lower gas prices for frustrated Americans."

LOAD-DATE: June 19, 2008

LANGUAGE: ENGLISH

DISTRIBUTION: Virginia

GRAPHIC: IMAGE; By Mark Schiefelbein -- Associated Press; Sen. John McCain angered environmentalists this week when he reversed course and called for lifting a ban on U.S. offshore drilling.

PUBLICATION-TYPE: Newspaper

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41 of 99 DOCUMENTS

The New York Times

June 19, 2008 Thursday
Late Edition - Final

The Big Pander to Big Oil

SECTION: Section A; Column 0; Editorial Desk; EDITORIAL; Pg. 26

LENGTH: 714 words

It was almost inevitable that a combination of $4-a-gallon gas, public anxiety and politicians eager to win votes or repair legacies would produce political pandering on an epic scale. So it has, the latest instance being President Bush's decision to ask Congress to end the federal ban on offshore oil and gas drilling along much of America's continental shelf.

This is worse than a dumb idea. It is cruelly misleading. It will make only a modest difference, at best, to prices at the pump, and even then the benefits will be years away. It greatly exaggerates America's leverage over world oil prices. It is based on dubious statistics. It diverts the public from the tough decisions that need to be made about conservation.

There is no doubt that a lot of people have been discomfited and genuinely hurt by $4-a-gallon gas. But their suffering will not be relieved by drilling in restricted areas off the coasts of New Jersey or Virginia or California. The **Energy** Information Administration says that even if both coasts were opened, prices would not begin to drop until 2030. The only real beneficiaries will be the oil companies that are trying to lock up every last acre of public land before their friends in power -- Mr. Bush and Vice President Dick Cheney -- exit the political stage.

The whole scheme is based on a series of fictions that range from the egregious to the merely annoying. Democratic majority leader, Senator Harry Reid, noted the worst of these on Wednesday: That a country that consumes one-quarter of the world's oil supply but owns only 3 percent of its reserves can drill its way out of any problem -- whether it be high prices at the pump or dependence on oil exported by unstable countries in Persian Gulf. This fiction has been resisted by Barack Obama but foolishly embraced by John McCain, who seemed to be making some sense on **energy** questions until he jumped aboard the lift-the-ban bandwagon on Tuesday.

A lesser fiction, perpetrated by the oil companies and, to some extent, by misleading government figures, is that huge deposits of oil and gas on federal land have been closed off and industry has had one hand tied behind its back by environmentalists, Democrats and the offshore protections in place for 25 years.

The numbers suggest otherwise. Of the 36 billion barrels of oil believed to lie on federal land, mainly in the Rocky Mountain West and Alaska, almost two-thirds are accessible or will be after various land-use and environmental reviews. And of the 89 billion barrels of recoverable oil believed to lie offshore, the federal Mineral Management Service says fourth-fifths is open to industry, mostly in the Gulf of Mexico and Alaskan waters.

Clearly, the oil companies are not starved for resources. Further, they do not seem to be doing nearly as much as they could with the land to which they've already laid claim. Separate studies by the House Committee on Natural Resources and the Wilderness Society, a conservation group, show that roughly three-quarters of the 90 million-plus acres of federal land being leased by the oil companies onshore and off are not being used to produce **energy**. That is 68 million acres altogether, among them potentially highly productive leases in the Gulf of Mexico and Alaska.

With that in mind, four influential House Democrats -- Edward Markey, Nick Rahall, Rahm Emanuel and Maurice Hinchey -- have introduced ''use it or lose it'' bills that would force the companies to begin exploiting the leases they have before getting any more. Companion bills have been introduced in the Senate, where suspicions also run high that industry's main objective is to stockpile millions of additional acres of public land before the Bush administration leaves town.

This cannot be allowed to happen. The Congressional moratoriums on offshore drilling were put in place in 1981 and reaffirmed by subsequent Congresses to protect coastal economies that depend on clean water and clean coastlines. This was also the essential purpose of supplemental executive orders, the first of which was issued by Mr. Bush's father in 1990 after the disastrous Exxon Valdez oil spill the year before.

Given the huge resources available to the **energy** industry, there is no reason to undo these protections now.

URL: http://www.nytimes.com

LOAD-DATE: June 19, 2008

LANGUAGE: ENGLISH

DOCUMENT-TYPE: Editorial

PUBLICATION-TYPE: Newspaper

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ENVIRONMENT
& ENERGY DAILY
THE BEST WAY TO TRACK CONGRESS

OFFSHORE DRILLING: Drilling advocates face uphill climb despite price pressure *(06/19/2008)*

Ben Geman and Alex Kaplun, *E&E Daily* reporters

President Bush's call to end offshore drilling bans highlights a basic question: Will record oil and gasoline prices weaken longstanding Capitol Hill support for the no-drilling zones?

Probably not, but environmentalists are worried. And Democratic leaders, wary of the push to open coastal waters, are increasingly arguing that the oil industry can do more with the acreage it already has under lease.

Efforts to upend the outer continental shelf leasing bans have fallen short in recent years. In 2006, when the more drilling-friendly GOP ran Capitol Hill, a measure relaxing the coastal bans and giving states discretion to allow drilling off their coasts passed the House but stalled. Congress eventually approved far more modest legislation opening up more acreage in the Gulf of Mexico.

But White House spokesman Tony Fratto yesterday wondered if the landscape has changed now that motorists are paying more than $4 per gallon. Current leasing bans cover both coasts and most of the eastern Gulf of Mexico.

"We know where Congress was when the price of gasoline at the pump was a dollar," Fratto said. "We know where they were when it was $2. Maybe there will be more members of Congress in the right place with gasoline at $4 ... a gallon."

In a Rose Garden speech yesterday, Bush said coastal states should decide if there will be oil and gas production in federal waters off their shores -- and get a cut of the royalties if they welcome the rigs (*Greenwire*, June 18).

Supporters of increasing domestic production are heartened by recent developments. Florida Gov. Charlie Crist (R) has dropped his opposition to offshore production and now supports allowing states to decide.

But Democratic leaders in both chambers quickly attacked Bush's plans. The issue has also become prominent in the presidential campaign, with presumptive GOP nominee John McCain in support of wider offshore drilling and Democrat Barack Obama attacking the plan.

Sources on and off Capitol Hill yesterday said that Congress remains highly unlikely to abandon limits on coastal production even though oil prices have surged in recent years -- and risen 40 percent this year alone.

Environmentalists are worried about how the soaring prices are affecting support for drilling restrictions, even though the Democrats are in charge on the Hill.

"It has changed the politics," said Athan Manuel, a lobbyist for the Sierra Club.

Manuel and other activists say expanded offshore drilling would endanger ecosystems without providing enough oil to curb prices meaningfully. "I think at the end of the day we will hold on," he said. "My hair will be a lot grayer, but I think the moratoria will still be in place."

Linda Stuntz, a Washington energy lobbyist who was a high-level Energy Department official during George H.W. Bush's presidency, says lawmakers should take another look at the current bans in light of the benefits of new supply and new technologies.

"I would like to think there is enough pressure on these guys to do something that they would be willing to take a fresh look," Stuntz said.

But are major policy changes in the offing? "The Washington insider in me would say probably not. It is an election year and the lines are drawn." Stuntz said. "I would love to be proven wrong."

The most recent test did not prove her wrong. In a party line vote last week, a House Appropriations subcommittee rejected Rep. John Peterson's (R-Pa.) proposal to remove coastal leasing bans (*E&ENews PM*, June 11).

Members may be considering similar measures all summer long. Peterson and other Republicans will offer three oil and gas development amendments to the fiscal 2009 Interior spending bill in the full House Appropriations Committee markup, likely next week. That markup was scheduled for yesterday, but Democrats scrapped it to finish work on the Iraq supplemental spending bill.

Peterson's chief of staff, Jordan Clark, said they have doubts about the delay but say it only helps the GOP cause. "The further this train goes down the track, the more grassroots support we get behind this," Clark said.

On the other side of Capitol Hill, Sen. Mary Landrieu (D-La.) plans to introduce a bill to allow states in areas where leasing is banned to have production offshore and share a portion of the revenues. "I imagine senators are looking at any relevant vehicle including appropriations," said Adam Sharp, an aide to Landrieu.

Also yesterday, Virginia's two senators -- Republican John Warner and Democrat Jim Webb -- introduced a bill that would allow natural gas production off their state's coast and provide the state with 37.5 percent of the leasing and royalty revenue. The 2006 law that expanded gulf oil and gas leasing acreage also provided revenue-sharing for Louisiana, Texas, Mississippi and Alabama.

One oil industry lobbyist suggested that more modest measures may surface as the debate continues. This source said that supporters of increased production are eyeing the Senate Interior Appropriations Subcommittee to make inroads.

One potential proposal when that subcommittee takes up the fiscal 2009 spending plan would be further drilling expansion in the eastern Gulf of Mexico, and new assessments of resources off East Coast states if those state governments request it, the lobbyist said.

The West Coast is "off the table," this source added. Subcommittee Chairwoman Dianne Feinstein (D-Calif.) is a staunch opponent of new oil and gas drilling off California.

Last year, the Senate Appropriations Committee approved an Energy Department spending bill that would have steered $10 million for seismic testing to assess the amount of oil and gas below federal waters in the eastern Gulf of Mexico. The measure was offered by Sens. Larry Craig (R-Idaho) and Byron Dorgan (D-N.D.) but did not ultimately become law.

State officials split on proposal

Reaction at the state level to Bush and McCain's calls for lifting the moratorium has been somewhat mixed. Several coastal governors said they remain strongly opposed while a handful of other officials said the policy was worth exploring.

California Gov. Arnold Schwarzenegger (R) -- who has often clashed with the White House on energy policy but has endorsed McCain -- reaffirmed his opposition yesterday to drilling off the state's coast.

"California's coastline is an international treasure. I do not support lifting this moratorium on new oil drilling off our coast," Schwarzenegger said.

On a conference call with reporters organized by the Obama campaign, two other coastal governors -- New Jersey Gov. Jon Corzine (D) and North Carolina Gov. Mike Easley (D) -- said they did not believe their states would approve offshore drilling if given the option.

"I don't think you're going to see any change on this -- people have studied this issue long enough," Easley said. "I don't think they're going to bite on this."

Elsewhere though opposition to offshore drilling appeared to be softening somewhat, highlighted by Crist's support for coastal drilling.

In Virginia, former governor and Democratic Senate candidate Mark Warner (D) yesterday gave a lukewarm endorsement to the proposal, saying he generally supported giving states the ability to decide whether they should allow drilling. But he also said during a campaign stop that other policies would do more to lower costs at the pump. Current Gov. Tim Kaine (D) has endorsed a study of the resources available offshore though he has yet to expressly back drilling.

Democrats to industry: Drill what you have

Amid pressure for expanded offshore access, Democratic leaders in both chambers are highlighting proposals that would pressure oil companies to produce on their current onshore and offshore leases.

Reps. Rahm Emanuel (D-Ill.), who chairs the House Democratic Caucus, Ed Markey (D-Mass.) and Nick Rahall (D-W.Va.) have floated plans that would create escalating fees on companies for their nonproducing leases and prevent companies from obtaining new leases unless they are already producing oil or gas from their current leases or "diligently developing" them.

Democratic leadership aides say they want to bring measures addressing the undrilled leases to the floor but did not provide a time frame.

The issue was discussed at a meeting among lawmakers yesterday that included these members, and the measures are under consideration for moving ahead, an aide said.

Eric Bontrager contributed to this story.

59 of 99 DOCUMENTS

The New York Times

June 19, 2008 Thursday
Late Edition - Final

Will $4 Gasoline Trump a 27-Year-Old Ban?

BYLINE: By SHERYL GAY STOLBERG; David M. Herszenhorn contributed reporting.

SECTION: Section A; Column 0; National Desk; NEWS ANALYSIS; Pg. 20

LENGTH: 1084 words

DATELINE: WASHINGTON

One was an oilman from Texas, the other a high-paid **energy** executive. Despite that, or perhaps because of it, for seven years George W. Bush and Dick Cheney have been unable to persuade Congress and the public that domestic oil drilling is an answer to America's **energy** needs.

With the clock running down on his presidency, Mr. Bush made one last push Wednesday by calling on Congress to end the 27-year moratorium on most offshore drilling. With oil at more than $130 a barrel, gasoline over $4 a gallon and the broader economy threatened, the White House is betting it can finally break a decades-old Washington deadlock between those who favor domestic oil exploration and those who say conservation is the key.

The question is whether Americans are feeling enough pain at the pump to force their elected leaders to go along, and whether it will make any real difference if they do.

''If Congressional leaders leave for the Fourth of July recess without taking action, they will need to explain why $4-a-gallon gasoline is not enough incentive for them to act,'' Mr. Bush said Wednesday in the White House Rose Garden. ''And Americans will rightly ask how high oil -- how high gas prices have to rise before the Democratic-controlled Congress will do something about it.''

Other Republicans, notably Senator John McCain, the party's presumptive presidential nominee, are abandoning their long-held opposition to drilling in coastal waters. Newt Gingrich, former speaker of the House, recently posted an online petition, headlined ''Drill Here, Drill Now,'' to strengthen support for domestic oil exploration, and gathered 650,000 signatures in two weeks.

''My prediction is that unless oil prices go down below $60 a barrel, you are now at a fundamental turning point at which you will see a new political coalition emerge,'' Mr. Gingrich said in an interview. ''This is a huge populist issue, and politicians who ignore it do so at their own peril.''

But Democrats do not feel especially imperiled. Although one moderate Democrat -- Senator Mary L. Landrieu of Louisiana, who has long advocated expanding drilling in the Gulf of Mexico -- is drafting legislation aimed at increasing domestic production, the leadership is holding fast. Speaker Nancy Pelosi of California said Wednesday, ''We cannot drill our way to **energy** independence.''

If anything, Democrats say, the White House action gives them a chance to paint Mr. Bush as beholden to the oil industry and Mr. McCain as a clone of Mr. Bush, a message that will only grow louder as the November election draws near.

''To have President Bush be the face of this issue for the Republicans means having the worst possible spokesman,'' said Geoff Garin, a Democratic strategist who helped run Senator Hillary Rodham Clinton's presidential campaign.

''What Republicans are doing for themselves right now,'' Mr. Garin added, ''is deepening the impression that they are the party of Big Oil.''

Whether $4-a-gallon gasoline is producing more support for domestic drilling is hard to discern. A Gallup poll conducted last month found that 57 percent of those surveyed favored drilling for oil in coastal and wilderness areas that are now off limits, but there are no earlier data for comparison. In March, before the latest spike in gasoline prices, a Pew Research Center survey found that 50 percent opposed drilling in the Arctic National Wildlife Refuge, in Alaska, while 42 percent were in favor.

Mr. Bush has long supported the proposal to drill along a coastal strip of the refuge. But he has not before taken up the cause of offshore drilling, partly because it was such a hot-button issue in the state of Florida, where his brother Jeb was governor. Congress first adopted its moratorium against drilling on the outer continental shelf, 3 to 200 miles offshore, in 1981. In 1990, Mr. Bush's father signed an executive order reinforcing the ban; Mr. Bush promised Wednesday to rescind the order if Congress ended its moratorium.

In the Rose Garden, the president made the case that in the long run, the solution to high prices was to reduce demand for oil by promoting alternative-**energy** technologies, a view widely shared across the political spectrum. But ''in the short run,'' he said, ''the American economy will continue to rely largely on oil, and that means we need to increase supply, especially here at home.''

The federal **Energy** Information Administration estimates that 18 billion barrels of oil are in the area covered by the moratorium, and the White House says that is enough to match current American production for 10 years. But a 2007 analysis by the agency concluded that opening up drilling in the moratorium area ''would not have a significant impact on domestic crude oil and **natural gas** production or prices before 2030.''

The primary concern about offshore drilling has been that unsightly oil rigs would dampen tourism, or that spills would threaten the environment. Advocates, and even critics, say new technology has greatly reduced the risk of spills. But David B. Sandalow, an **energy** expert at the Brookings Institution in Washington who advises Democrats, argues that the amount of oil that could be recovered is so small as not to be worth the environmental risk.

''It's like walking an extra 20 feet a day to lose weight,'' he said. ''It's just not enough to make a difference.''

But Robin West, who managed the offshore leasing program for the Reagan administration and is now chairman of PFC **Energy**, a consulting company, argues that additional supply could make a difference in price, especially if domestic drilling were coupled with aggressive conservation efforts. He said it would take time, though -- a minimum of five or six years, even if drilling were to begin today.

''A logical **energy** policy,'' Mr. West said, ''is to encourage production and discourage consumption. And prices will go down.''

But with just seven months left in his presidency, the relationship between Mr. Bush and Congressional Democrats is already set, and unlikely to produce fresh agreement on what might be a logical **energy** policy, especially in the thick of a presidential election season.

As Vin Weber, a Republican former congressman from Minnesota, said: ''I think we have been deadlocked on **energy** over ideological concerns for a long time, and the urgency in the country was not there to break out of this debate. And now the urgency of the country is there, and it's too late for this administration.''

URL: http://www.nytimes.com

LOAD-DATE: June 19, 2008

LANGUAGE: ENGLISH

GRAPHIC: PHOTO: President Bush on Wednesday with Interior Secretary Dirk Kempthorne, left, and **Energy** Secretary Samuel W. Bodman. (PHOTOGRAPH BY BRENDAN SMIALOWSKI FOR THE NEW YORK TIMES)

DOCUMENT-TYPE: News Analysis

PUBLICATION-TYPE: Newspaper

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ONE HUNDRED TENTH CONGRESS
U.S. House of Representatives
Committee on Energy and Commerce
Washington, DC 20515–6115

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September 3, 2008

Mr. Michael W. Masters
Managing Member and Portfolio Manager
Masters Capital Management, L.L.C.
17 Church Street, 3rd Floor
Christiansted, USVI 00820

Dear Mr. Masters:

Thank you for appearing before the Subcommittee on Oversight and Investigations on Thursday, June 23, 2008, at the hearing entitled "Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II." We appreciate the time and effort you gave as a witness before the Subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from a certain Member of the Subcommittee. In preparing your answers to these questions, please address your response to the Member who submitted the questions and include the text of the Member's question along with each of your responses. In the event you have been asked questions from more than one Member of the Committee, please begin the responses to each Member on a new page.

In order to facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business **Friday, September 19, 2008**. Your written responses should be delivered to **316 Ford House Office Building** and faxed to **202-225-5288** to the attention of Kyle Chapman, Legislative Clerk. An electronic version of your response should also be sent by e-mail to Mr. Kyle Chapman at **kyle.chapman@mail.house.gov** in a single Word formatted document.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Kyle Chapman at (202) 226-2424.

Sincerely,

John Dingell

JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigations

The Honorable John Shimkus, Ranking Member
Subcommittee on Oversight and Investigations

Questions for the Record – June 23, 2008 Testimony

Honorable Bart Stupak

1. ***How large is the pool of investable funds in pension plans, sovereign wealth funds, endowments and other institutional investments?***

   All of our research is based on publicly available data. We have no proprietary information to rely upon. Our estimate of total institutional investment is approximately $29 trillion with $26 trillion in "tax-exempt assets" and $3 trillion in sovereign wealth funds.

   Those figures comes from these sources:
   - "UK pension fund returns at five-year low," IFAonline, Jennifer Bollen, January 28, 2008. (says pension funds have $26 trillion in assets) http://www.ifaonline.co.uk/public/showPage.html?page=698204

   - "Sovereign Wealth Funds," Council On Foreign Relations, Lee Hudson Teslik, January 18, 2008. (says sovereign wealth funds have $3 trillion in assets) http://www.cfr.org/publication/15251/

2. ***You testified that $260 billion has been invested in commodity indexes as of March 2008 or about 1 percent. Do you have more recent information on the notional value of these investments?***

   Our estimates of the level of commodity index investment are based upon the CFTC's Commodity Index Trader report utilizing simple methodologies as explained in the Appendix to our May 20th testimony in front of the Senate Homeland Security and Governmental Affairs Committee.

   We estimate that commodity index investment on July 1 was approximately $317 billion and that by September 2nd that level had dropped to approximately $220 billion.

3. ***Does that amount include index investments in commodities that are marketed through exchange-traded funds (ETFs) or commodity-linked notes?***
   Our understanding is that the CFTC's Commodity Index Trader data would include the positions resulting from the hedging of ETFs and ETNs.

4. ***What is the dollar value of exchange-traded commodity futures in the U.S. U.K. and elsewhere? What is included in this estimate?***

   For purposes of our analysis we have looked at the dollar value of open interest for the 25 commodities that are part of the Standard & Poors Goldman Sachs Commodity Index and the Dow Jones – AIG Commodity Index.

Questions for the Record – June 23, 2008 Testimony

The most recent date for which we have performed these calculations was July 1, 2008 and we used the average dollar value and the average open interest for 2008. We estimate the value of these 25 commodities to be $835 billion.

5. ***Given that about 1 percent of institutional money has been invested in commodity futures, why is this having such a large effect on commodity markets?***

   What is a small amount of money to the institutional investment community is a large amount of money as far as the commodities futures markets are concerned. We estimate that in 2005 the top 25 commodities, which make up the major indices, had a market value of $246.5 billion. We further estimate that from January 1, 2005 to July 1, 2008 Index Speculators poured $148 billion into these commodities. That is a very large amount of money flowing into a pretty small market.

6. ***If institutional investors were to increase their commodity-index investments from 1 to 5 percent of their portfolios, what effect would that increase have on prices in commodity markets? What is the potential for such an increase?***

   With $29 billion in assets, 5 percent represents $1.45 trillion. As mentioned in question number four the total value of the Top 25 commodities we estimated to be approximately $835 billion. If over a trillion dollars flows into a market that is under a trillion dollars in size it would have a massively disruptive effect that would drive prices to never before seen levels.

   We do not know what the probability of this occurring would be nor do we know the timeframe over which it could occur. Some of the probability is contingent upon what Congress does and/or threatens to do.

7. ***Do you believe that commodity-index speculation should be eliminated or simply reduced to an acceptable level? What is an acceptable level?***

   We believe that commodities futures markets exist to help bona fide physical hedgers reduce their risk and discover prices. Historically, speculators have been allowed to participate in the markets in a limited fashion because they provide liquidity to the markets. Right now Index Speculators trade in unlimited quantities (they face no position limits when utilizing the swaps loophole) and they consume liquidity and damage the price discovery function. For that reason we see no benefit for the commodities futures markets from the participation of Index Speculators and believe that the damage they inflict is reason enough to completely ban them. For that reason we believe there is no acceptable level.

Questions for the Record – June 23, 2008 Testimony

8. ***In your testimony, you suggest that if a Wall Street investment bank controls physical commodities, they cannot accumulate futures positions larger than their physical holdings.***

   Just to clarify, we believe that Wall Street banks with physical commodity businesses should not be given unlimited access to the futures markets. So if a Wall Street Bank owns a grain merchandising business that handles 1 million bushels of corn annually this should not entitle that bank to have massive positions of say 100 million bushels at a time.

   a. ***What specific threats are posed by banks holding physical commodities and futures positions in excess of their physical holdings?***

      The exemption from position limits given to bona fide physical hedgers is given with the fundamental premise that they are trading in order to reduce their risk and that they do so in an orderly manner. Any market participant that is trading to assume risk and make profits (which would be any speculator and any physical hedger who is trading bigger than their underlying exposure) should be subject to speculative position limits in order to protect the price discovery function. The risk is that excessive speculation can lead to price bubbles, which reflect speculative fervor and not fundamental supply and demand considerations.

      For further reference see Section 5.02[1] "Derivatives Regulation," Philip McBride Johnson and Thomas Lee Hazen, Aspen Press, 2004, page 1235, which states:

      "However, Section 4a (7USC6a) is expressly concerned with "excessive speculation" and thus is not specifically an anti(-)manipulation provision. Rather, section 4a focuses upon market disorders attributable to unbridled speculative activity, without regard to whether that speculative frenzy has a manipulative purpose."

      Also see our large report "The Accidental Hunt Brothers" Michael W. Masters & Adam K. White, July 31, 2008.

   b. ***Is there a need for greater transparency in this area?***

      Yes, absolutely.

   c. ***Is there specific information you believe Congress or the U.S. Commodity Futures Trading Commission (CFTC) should obtain to better understand this dynamic?***

To better understand the dynamic of commercial participants trading larger than their underlying physical exposures you would need the trading records of those commercial participants as well as the reported size of their physical exposures.

I believe that at one point in the history of speculative positions limits, in order to qualify for a bona fide physical hedging exemption you needed to report the size of your real world physical exposure. I don't know if that is the case today and if it is not then that data would be integral to understanding the situation.

I think we recently had a very similar situation occur with the CFTC's reclassification of one large trader from commercial to non-commercial. The CFTC discovered this operation, which had a physical crude oil business, was engaged in all kinds of trading which had little to do with hedging their underlying physical market exposure.

9. ***In your testimony, you urge Congress to assess whether Wall Street banks are selling investments based on the physical hoarding of commodities.***
    a. ***Please provide examples of who is doing this, how it works, and what the implications are for commodity prices.***

    The documents we provided to the subcommittee show that Credit Suisse is selling iron ore and other swaps. While the counterparty to the swap does not take possession of the physical iron ore our understanding is that physical iron ore is used by the swaps dealer to hedge the transaction. If you take physical iron ore and put it in a warehouse to hedge an investment then that is hoarding. Nobody would dispute that hoarding will affect prices and if enough hoarding takes place it can result in critical shortages.

    b. ***What specific information should Congress obtain to assess and quantify the extent of physical hoarding?***

    Congress should begin by talking to Credit Suisse and asking them how they are hedging their iron ore swaps. If Credit Suisse is signing contracts for physical delivery of iron ore in the future then that can easily have an impact on prices because the iron ore producers will have less capacity to sign contracts with legitimate consumers of the physical product. These legitimate consumers will then have to pay more or they will have to buy the commodity on the spot market and store it to ensure an adequate supply of iron ore for their operations.

Questions for the Record – June 23, 2008 Testimony

10. ***Investment banks and exchanges tell us that increased regulation will drive futures trading off shore.***
    a. ***Is that a credible threat?***

    It is not a credible threat for commodities futures. Commodities futures involve physical delivery provisions. Physical commodity producers and consumers will prefer a futures contract with physical delivery provisions. Because they face no speculative position limits they will not abandon a U.S. regulated, liquid, futures exchange offering contracts with physical delivery in order to trade on an offshore, non-U.S. regulated, startup/low liquidity futures exchange that cannot offer contracts with physical delivery.

    Likewise a speculator that is under position limits will have no incentive to abandon a U.S. regulated liquid futures exchange where the prices are not excessively speculative and are reflective of supply and demand.

    The only market participants with the incentive to trade elsewhere are the traders subject to the position limits. Since speculative position limits are intended to stop these large speculators from trading on the exchange then their migration to another arena is the goal. With that said it is important that the CFTC does not grant arbitrage exemptions from position limits for people trying to arbitrage prices between a U.S. regulated exchange and a non-U.S. regulated exchange.

    b. ***What are the consequences of driving trading off shore? Would this affect employment?***

    We don't believe that anyone other than large speculators would seek to shift their trading and we further doubt that they would in fact try to trade overseas if their only trading partners are other large speculators. Even if they do shift their trading overseas the impact on employment would be de minimis.

    c. ***In the face of greater regulation, would investment banks simply transact from terminals regulated by other countries using employees and physical infrastructure in the U.S.?***

    Anyone physically located inside our sovereign borders is subject to our laws. Certainly this is true with regard to futures trading regulation. The only reason that people are allowed to trade foreign markets from inside the U.S. is because the CFTC specifically allows it.

   d. ***What is the fiscal effect of moving trading off shore? Could this affect U.S. or local tax revenues?***

      Since very little if any trading would move offshore the impact would be small. Any impact on tax revenues would likewise be small. Inflated oil prices have inflicted severe pain upon our economy. Revitalizing the economy by bringing down gas prices to reasonable levels would result in a huge increase in tax revenues.

11. ***Please respond to three key specific concerns Credit Suisse raises regarding your testimony. They argue that:***
    a. ***Other commodities, which are not part of the commodity indexes, such as iron ore and cobalt, have gone up in price even more than the index-listed commodities.***

       There is an entire body of academic research dealing with the "substitution effect" and "cross elasticity of demand." A power plant that has a choice between burning coal or natural gas to generate steam to turn their turbines will choose whichever is cheaper. If the price of natural gas rises dramatically they will shift to coal until coal prices rise dramatically. The same is true for the tradeoff between aluminum and steel, wheat and rice, et cetera. In addition because these non-exchange traded markets are smaller and less liquid the price increases could be more dramatic than those markets that have exchange traded futures.

       In addition like we said Credit Suisse and others are enabling institutional investors to make "investments" in iron ore, cobalt and a whole host of other non-exchange traded commodities.

    b. ***Some commodities, which are part of the popular commodity indices, such as wheat, have decreased in price, and this demonstrates that these markets are not being overwhelmed with commodity-index money.***

       First of all we have never argued that the laws of supply and demand have been abolished (what we have argued is that all forms of supply and demand have an impact on prices). If ranchers are sending their herds to slaughter because corn prices are so high they are losing money by feeding their cattle then that will depress prices and potentially offset the effects of index investments. So sometimes index speculation results in prices that are staying steady or falling slightly when they should have been falling dramatically.

       Several of the commodities pointed out to be immune from the effects of index speculation (lean hogs and feeder cattle) actually cash settle against a nationwide survey of spot market prices. For lean hogs and feeder cattle spot prices are not determined by futures prices (like they are for grains and energy) and it is difficult to arbitrage between spot and futures prices so these commodities are much less affected by index investment.

Wheat prices rose 40% from 915 on 1/1/08 to 1280 on 2/27/08. This was on top of an increase of 83% increase in 2007. So Wheat has definitely not been immune from the effects of index speculators.

c. ***You have overestimated the amount of money flowing into index investments and most of the increase is due to price appreciation, not new investment into commodity indexes.***

Our methodology is simple and publicly available as mentioned earlier. Likewise it is simple to calculate inflows. If the index goes up by 10% but the assets tied to that index go up 25% then you know 10% of the gain is due to price appreciation and 15% is due to inflows into the index.

We believe that our estimates based on the CFTC Commodity Index Trader data are conservative. For instance we estimate that on April 1st total index investment was around $250 billion (down slightly from $260 billion) and that meant an estimated corn position of 379,000 contracts. On that date the CIT report showed actual futures positions controlled by Commodity Index Traders to be 482,000 corn contracts. So we underestimate corn positions by more than 100,000 contracts or 27%.

12. ***One major investment bank told the Committee that 12.5 percent of their commodity investments were held by sovereign wealth funds. The CFTC however, informs us they are only aware of one sovereign wealth fund investing in the commodities futures market. Why is it important for the CFTC and Congress to have a detailed view on the role of sovereign-wealth fund investments in the futures markets?***

We do not believe that anyone should be permitted to make commodity index investments because of the damage that index speculators due to the price discovery function and the fact that they consume liquidity thereby providing no benefits to the marketplace.

The issue of sovereign wealth funds arises separately because it has been alleged by others that sovereign wealth funds originating in the Middle East have been pouring money into energy heavy indices like the S&P GSCI and driving up energy prices as a result

Questions for the Record - June 23, 2008 Testimony

Honorable Joe Barton

During the hearing, I asked whether you risked your money or you advised others how to risk money in the market. You stated that your firm risked your own money and other people's money, but not in commodity futures. According to your firm's March 31, 2008 SEC filings, your hedge fund held more than $200 million (over 20 percent of your holdings) in call options on four U.S. airlines and on General Motors. Given that the market value of these publicly traded firms is substantially affected by crude oil prices, there is reason to believe your firm has a financial stake in the level of crude oil prices.

You also testified that regulatory action you advocated could be reasonably expected to cut the price of oil in half in relatively short order. By way of follow up - how have you and/or your firm's holdings in the four U.S. airlines and General Motors been affected by the increase of crude oil prices over the last year? Do you or your hedge funds have specific financial interests that would be affected by the outcome of the policies advocated in your testimony? Please explain why or why not.

My firm, Masters Capital Management, holds a diversified portfolio of common stocks. Among the stocks and options we hold (as of our last SEC 13-d filing) are airline company equities and General Motors. The market value of our firm's holdings in these equities has fluctuated for many reasons over the past year. Some of those reasons include the following:

1. The general level of the US and world equity markets
2. The fluctuations of the US economy and investors general perceptions regarding the U.S. economy
3. The rest of the world economies and investor perception regarding other countries prospects
4. The general level of interest rates around the world that investor's use to appropriately discount financial models
5. The general perception by investors of the creditworthiness for these specific credits (airlines and GM)
6. The general perception of credit overall in the US economy and those levels
7. Various macro factors including currency levels around the world vs. the US dollar
8. The general perception of the risk of geopolitical events with regard to these specific industries
9. The general perception of risk around the world of geopolitical events that could have an effect on equity prices
10. The general level of oil prices and other commodity prices that these and other industries use as input costs and the generalized effect of high commodity prices on consumers in the U.S. and around the world.

This list is certainly not exhaustive but gives a reasonable starting point to an analysis on different effects of various items that could have affected the values of our holdings in airlines and GM over the past 12 months. Clearly identifying exactly how any one of these items affected the value of our holdings during this time would be difficult, as the financial markets tend to focus on different things at different times.

With regard to our financial interests, I think it is appropriate to surmise that since lower oil prices and commodity prices in general have been conducive to higher overall stock market multiples and a generally better economy, it is certainly reasonable to conclude that much lower commodity prices would have that effect in the future. If we continued to hold long positions in US equities and equity prices went up because of these factors, then it is likely our portfolio could increase in value. However, whether or not our testimonies would cause Congress to pass and the President to sign a bill that would eliminate excessive speculation in the Commodities futures markets and theoretically bring prices down is beyond our present knowledge. If commodities prices came down, whether or not that was in part caused by Congressional actions, then clearly, like other consumers, it is likely that I would benefit by paying much less for food and gasoline. Additionally, since corporations tend to pass these costs along, it is likely I would pay less for other goods and services as well.

Responses by Edward N. Krapels, Ph.D. to questions concerning his June 23 testimony before the Energy and Commerce Committee on Energy Speculation

1. **Has oil been transformed from a commodity into a financial asset?**

   To a degree, yes. The interest of institutional investors to hold oil as an asset has added to the "paper demand" for oil and underscores that price formation is not just a function of the physical supply and demand for oil.

2. **Oil prices are about $122 per barrel, up from about $69 at this time last year. What should the price be if it was determined solely by supply and demand fundamentals? How much of the price is attributable to speculation?**

   My best estimate is that a fundamentally supportable price in today's market (September 19, 2008) could be as low as $80-90 per barrel (WTI).

3. **You testified that pension, index, and sovereign fund managers have increased their exposure to financial energy contracts – especially crude oil – and that the amount is extremely large in proportion to the historic size of the energy commodity markets.**

   a. **Can you compare the size of these institutional investments in commodity futures with the size of the energy commodity markets?**

      I have never had sufficient data to undertake a formal study on this question so any answer to this question will use rough estimates. Just estimating based upon open interest from the latest CTFC Commitment of Traders Report for both futures and options, and the price per barrel on the same day, the size of the WTI paper market measured by the CFTC data (that is, NYMEX trades only) is roughly $300 billion. The estimate is only $115 billion if you do not include the options equivalents. While WTI is only one component of the energy markets it represents roughly 39 percent of the Goldman Sachs Commodity Index (GSCI) at the time of writing. It also represents roughly 53 percent of the energy components within the index. Although just estimates these numbers do give a rough approximation of the relative size of the energy markets. Even though NYMEX WTI prices set the clearing price for all other exchanges and over-the-counter deals, the open interest in crude oil indexed to WTI (on the ICE Exchange and at swaps dealers not participating in ICE), is not public information but is likely to be multiples of the volume of open interest in the NYMEX.

   b. **Have you reviewed the $260 billion figure used to quantify the size of index investments? Is this a reasonable estimate?**

      The $260 billion figure used to quantify the size of index investments seems like a reasonable estimate. It has likely changed dramatically in recent months as contracts have lost considerable value since July. The method of generating this $260 billion figure, however, is based on a couple of large assumptions, particularly that all index funds are trading based upon one of two indices. This might be the case but there has been no evidence as such.

   c. **What is the magnitude of these investments on oil futures prices?**

      This is difficult to determine but I would assume it would be a significant impact. Anytime you add a significant volume of money to a market, prices go up. If you liken it to the money markets, when the Fed increases the money supply through monetary instruments, inflation is always a concern. The relative size of the injected volumes, if commodity market growth of roughly $200 billion dollars since 2003 is accurate, compared to the overall size of the market would probably have a significant impact.

d. **Are the commodity futures markets too small to be used by institutional investors for their diversification strategies?**

It depends on the size of the specific commodity, but I would say that the commodity futures markets are too small to be used by investors with assets of this magnitude. Even at low percentages of deployment of index funds, the volume of contracts that these players have added to the market has, in my opinion, strongly influenced prices. The explosion in the number of contracts traded by these entities is also likely to pull the spot markets along for the ride. It is notable that their effect is evident both when they are taking long positions (speculating that prices will go up), and when they are liquidating those long positions or (in the case of some funds) short-selling oil via taking short positions (speculating that prices will go down).

4. **You testified, "it appears from our analysis that the increase in demand for paper oil barrels over the past several years has helped to drive those prices up." What analysis has your firm performed in this area?**

We have analyzed the increase in open interest and compared this with the rise in prices. We have performed relatively straightforward correlation analysis on the numbers, and, as in any complex issue, have found that at times the correlations are high, and at others, they are low. We do not claim that speculation always drives prices, simply that they influence prices to greater or lesser degrees. Recent events have made it more acceptable to say that speculators have had extraordinary influence on asset prices. In oil this has been true for a long time.

5. **Mike Masters estimates that about 1 percent of the funds held by institutional investors have been put into index investments. If this number was to increase to 5 percent, do you expect that this would drive prices higher for energy commodities?**

Yes. Although I have not performed any stringent analysis of this situation, just looking at CalPERS alone, one of the largest pension funds in the U.S., if they follow the GSCI and increased their investment from roughly 1% to 5% this would represent an additional $5.4 billion just in the WTI and Brent markets based upon the most recent value of the fund as of June 30th of roughly $240 billion.

6. **In your testimony, you recommend that the IntercontinentalExchange, Inc. (ICE) should provide greater transparency with respect to trading on their markets. What particular information should ICE Futures disclose to ensure that their markets are sufficiently transparent?**

I think that the ICE exchange should provide the same type of information that is required of the Nymex. They should disclose to the CFTC who the large traders are and position changes in the market, particularly with respect to a few broad categories. I think the recent CFTC actions and cooperation initiatives were a good start.

7. **You recommend that all exchanges and over-the-counter markets impose and enforce position limits.**

   a. **Even if the current position accountability levels imposed by the New York Mercantile exchange (NYMEX) (10,000 contracts any month, 20,000 contracts all months) were enforced, is the aggregate impact of positions taken by hedge funds, pension funds, and commodities-index investments across all markets so large that even if the U.S. Commodity Futures Commission (CFTC) was to enforce these position limits, these investments would contribute to speculative bubbles?**

   It is possible. If there are a number of entities that do maximize these limits, they could contribute to significant appreciation in the market. These limits don't address the aggregate size of the market so a speculative bubble would definitely still be possible under these limits, particularly if a number of new participants enter the market. It would however, require a larger number of trading firms moving in a similar direction to create this bubble.

b. Should position limits be reduced to lessen excessive speculation?

I think position limits on speculators should be reduced, particularly considering the number of new participants in the market. It is more important to ensure that the size of the speculator portion of the market does not significantly outweigh the size of the commercial piece of the market that uses the market for risk management purposes.

c. If so, what method should be used to establish the appropriate level?

I am a practical observer rather than a scholar on these markets. As a consultant to my clients (rather than an academic) I would be much more comfortable with speculative positions below 20 percent of total options and futures open interest than above 20 percent. It is also essential that we call a hedger a hedger, and a speculator a speculator. This has not been the practice and I am pleased to see greater interest in resuming these "best practices" for futures markets.

8. The CFTC argues that the large influx of capital into index investment through swaps has not affected price because the net position of swap dealers does not indicate there is a significant net long position. Please review the attached copy of their presentation from the hearing. Is the CFTC's analysis valid in dismissing the impact of index investments by swap dealers?

I am not sure that their analysis is valid. I think that it is more important to look through the trades to determine who is on the other side of the trade. If all of the long positions for swap transactions are index funds and only a small portion of the short transactions are speculators than these swap transactions are skewing the data. If swap dealer clients that should be classified as non-commercials were moved to the correct category it would likely paint a much better picture of what is actually going on in the market and make it much easier for regulators and policy makers to analyze the impact of these participants. The current situation also allows speculators to ignore position limits. While according to the most recent publication by the CFTC this is not widespread practice, it does present the opportunity, particularly in the short-term to produce significant volatility issues.

Sincerely,

Edward N. Krapels, Ph.D.
Advisor, Financial Energy Markets Services

House Committee on Energy and Commerce
Subcommittee on Oversight and Investigations
U.S. House of Representatives
June 23, 2008

"Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?"

Questions from the Honorable Bart Stupak to Doug Steenland, President and CEO of Northwest Airlines, Inc.

1. You testified that supply and demand fundamentals do not explain price increases or volatility in oil markets. What is the basis for this conclusion?

Answer: The fundamentals of supply and demand are certainly having an impact on oil prices, but they alone cannot account for the tremendous run-up that we have seen in crude oil prices over the past 13 months. Supply and demand simply cannot explain the price of oil at $95 in January, at $147 in June and back to $90 in September.

The only thing that explains this volatility is the upward pressure that excessive speculation places on commodity prices. We have seen a tsunami of speculative money flowing into commodities markets in recent years. Assets allocated to commodity indices grew from $13 billion in 2003 to $317 billion in July 2008, a 24-fold increase. At the same time, the prices for the 25 commodities that make up these indices rose by an average of over 200 percent. As this speculative money flowed into the market, the volume of oil traded "on paper" was, on some trading days, as high as 22 times greater than the volume of oil consumed. In other words, institutional investors turned commodities into just another asset class, causing severe market imbalance and upsetting the natural relationship between supply and demand and driving up prices. These price increases occurred despite the fact that the world has not experienced a shortage of oil. Consumers are not waiting in line for gasoline and OPEC has said that there are no supply shortages in the world oil markets.

As hundreds of billions of dollars poured into the relatively small commodities futures markets, prices were driven up dramatically. Even more telling, between July and early September, commodity index investors reportedly sold a record $39 billion worth of oil futures, strongly coinciding with the stunning recent decrease in oil prices that we have experienced in recent weeks – a decrease that occurred despite two hurricanes tearing through the Gulf of Mexico and Texas, and other supply disruptions in oil producing nations around the world.

2. The futures and investment banking industry wrote Congress criticizing proposals to reduce speculation as "counterproductive." They claim it would drive needed speculative capital from the markets to other trading venues that are less accessible to U.S. regulators. They oppose limiting investments in commodity

indexes because this would limit retirees' and future retirees' investment choices to protect themselves from inflation.

a. How many jobs have been lost in the air transport sector and/or at Northwest Airlines that could be reasonably attributed to excessive speculation in the energy markets? How large are the losses to State and Federal tax revenues? How does this compare with the risks of job loss for the financial-services sector?

Answer: Industrywide, members of the Air Transport Association expect to have approximately 20,000 fewer full-time equivalent employees in the fourth quarter of 2008 than they did in the fourth quarter of 2007. Virtually all of this decrease, through the use of layoffs, buyouts, and early retirements, is a result of skyrocketing fuel costs over the past twelve months.

Airlines, as they are currently structured, simply cannot operate profitably when fuel costs are those levels and ATA member companies have been forced to contract in order to survive. This has resulted in thousands of layoffs, significant reductions in service, and financial harm to ATA's member companies and their shareholders. This clearly results in a significant loss of tax revenues in jurisdictions around the country.

Given the extreme volatility the U.S. financial services sector is experiencing today, it is difficult to quantify what impact these changes would have on them, but the cost of fuel impacts every aspect of our economy and preventing artificial and unnecessary price inflation will greatly benefit our economy as a whole.

b. What are the costs to your industry of inaction?

Answer: Every $1 increase in the cost of a barrel of jet fuel results in $465 million in increased fuel costs for our industry. Again, assuming speculation is responsible for a portion of the run-up in fuel costs over the past 12 months, this has unnecessarily cost our industry billions of dollars and forced significant service cutbacks and layoffs – and it could happen again. Congressional action to place reasonable limits on traders' activities and shine more light on the players and positions within the oil market – both on exchanges and in over-the-counter trades – will significantly reduce the ability of traders to inflate another speculative bubble in the oil market and again inflict such tremendous damage on our economy.

c. How do the costs of congressional inaction to your industry compare with the costs or consequences of regulating speculation on Wall Street? How should Congress balance these two considerations?

Answer: While we are not in a position to testify as to the costs that H.R. 6604 or other speculation legislation would impose on Wall Street, we would note that, in the many congressional hearings that have been held on this topic in the past several months, witnesses representing the commodity exchanges have never raised this as a concern.

Our primary goal of imposing reasonable position limits to prevent a concentration of ownership should not have a "cost" associated with it. As we have indicated above, the financial impact of inaction on our industry has been huge and it continues to this day, despite the recent reduction in fuel prices. Moreover, it is entirely possible that the speculative bubble could reinflate without strong congressional action.

Given the tremendous damage high fuel prices can inflict on virtually all sectors of our nation's economy, we feel that efforts to bring down the cost of that commodity should be given significant deference by policymakers and strong speculation legislation is an important component of such efforts.

d. Does Northwest do physical hedging through the swaps markets? What percentages of your fuel costs are hedged?

Answer: As of September 18, Northwest has hedged approximately 70% of its remaining 2008 jet fuel requirements and approximately 41% of its first quarter 2009 requirements using a combination of collars and swaps on crude oil and jet fuel.

e. Has Northwest reviewed H.R. 6604- The Commodity Markets Transparency and Accountability Act of 2008? Please provide your views on its strengths and weaknesses.

Answer: Northwest Airlines and other members of the Air Transport Association have reviewed H.R. 6604 and endorsed the legislation. We feel that it is commendable legislation that would discourage excessive speculation and promote transparency in commodities markets. This will help prevent another massive speculative price bubble in the oil market. That said, we prefer the approach you took in your legislation (H.R. 6330), which would have directed the CFTC to establish hard position limits on over-the-counter market transactions rather than simply suggesting that they investigate the matter and take the actions they deem appropriate.

f. Would H.R. 6604 reduce liquidity and create the unintended effect of driving up oil prices?

Answer: Again, Northwest Airlines and the Air Transport Association believe H.R. 6604 is good legislation and we endorsed it. It would certainly not deny oil commodity markets the liquidity they need to perform their intended function – providing actual physical hedgers, like airlines, with a trustworthy mechanism to lay off some of the price risk of producing and purchasing commodities like oil. There are no provisions in that bill would create upward pressure on oil markets.

g. Has the airline industry examined the extent to which their remaining defined benefit-pension plans are investing in commodities and could be contributing to the run-up in oil prices?

Answer: No, the airline industry, as a group, has not compiled this information. Individual airlines may have data on this but the Air Transport Association does not.

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September 3, 2008

The Honorable Bart Stupak
Chair, Subcommittee on Oversight and Investigations
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Dear Chairman Stupak,

Thank you again for the opportunity to appear before the subcommittee on June 23, 2008 addressing the issue of "Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation-Part II."

In Chairman Dingell's letter to me of September 3, 2008 you posed additional questions which I am pleased to answer here.

Mr. Stupak: You testified that increasing domestic drilling for oil would have little or no effect on the price of a barrel of oil because the futures markets have become dislocated from supply and demand economics. How far dislocated are the markets from underlying supply and demand fundamentals? How much of the price of oil at $125 per barrel is attributable to excessive speculation?

Mr. Guilford: From its peak at $147.00 per barrel in mid-July, crude oil has fallen this date in mid-day trading to $109.00, and earlier had gotten as low as $105.00 on this date. A six week decline of 26% cannot be attributed solely to a strengthening of the dollar, solely to a significant decline in demand worldwide, solely to an increase in overall energy production, or a combination of these factors. The panel that appeared before mine suggested that as much as half of the then $125 a barrel was likely speculative driven, leaving us with a market-drive [supply and demand driven, with currency influence], of something between $60 and $65 a barrel. Even at these levels it represents a doubling of crude oil prices between late 2002 and 2007. I would not leave you with the impression that increased domestic drilling for oil would not be beneficial for reasons relating to energy and national security as well as balance of payments because I strongly believe that increased domestic production of energy is an important part of any sound energy policy.

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Mr. Stupak: You recommend closing a number of loopholes and reducing the degree of speculation in the futures markets. The futures industry says that if we regulate them, they will shift their trading offshore to less-regulated jurisdictions. What is your response to their concern that global markets are linked electronically and that trading can simply move to other less-regulated jurisdictions?

Mr. Guilford: This is a fair point, as commodities trading exists in more than 20 countries around the world and what the United States does by itself has limited effect and would drive trading to off-shore platforms. That said, highly successful efforts have been made to combat such issues as money laundering since the 1980's, also an activity undertaken through electronic means in the world's financial system. Today, a panoply of international organizations -- the United Nations Office for Drug Control and Crime Prevention (UNODCCP), the Financial Action Task Force (FATF), the Caribbean Financial Action Task Force (CFATF), the Organization of American States Inter-American Drug Control Commission (OAS-CICAD), the Inter-American Development Bank (IDB), the European Commission, the Council of Europe, the Asia Pacific Group on Money Laundering (APG), the Offshore Group of Banking Supervisors (OGBS), the Basle Committee on Banking Supervision, Interpol, the World Customs Organization (WCO), and the Egmont Group of Financial Intelligence Units -- are involved in various aspects of coordinating the development of anti-money laundering laws and regulations, negotiating bilateral and multilateral accords to cooperate and exchange information and evidence in support of money laundering and asset forfeiture investigations, assessing regional threats, advising on specific policy and administrative changes, and providing increasingly coordinated technical assistance and logistical support. Congressman Larson's office and I have had several conversations on the cross-commodity trading issue and we encouraged the use of a Dear Colleague and other Congressional communications to the President to make this a priority among the G-8, as was the case on money laundering in 1989 among the then G-7. Clearly, where there is a multinational and relatively successful effort to combat money laundering we can use that model to do the same information sharing, use of bilateral accords and information exchanges between U.S. and foreign exchanges and use the leverage of the U.S. being the world's largest energy consumer to facilitate that effort.

Mr. Stupak: You testified that there are $9 trillion dollars held in over-the-counter commodity derivatives, according to the Bank for International Settlements. The U.S. Commodity Futures Trading Commission has no jurisdiction over these massive "dark markets," particularly with respect to energy. What steps should Congress take to shed some light on these markets, particularly if these over-the-counter deals affect the price of commodities?

Page 3.
The Honorable Bart Stupak

Mr. Guilford: That total amount of world OTC/commodity investment increased from $7.1 trillion to $9 trillion in just 2007, and of that is approximately $1.4 trillion in the energy complex and that has had the affect of inflating the values of those energy commodities. The Foreign Boards of Trade Loophole needs to be closed by such measures as a G-8 agreement on establishing a protocol for information sharing between international regulatory authorities much as the G-7 began in 1989 with a Financial Action Task Force [FATF] on money laundering, and further by consideration of restricting trading on energy commodities for U.S. consumption to those platforms regulated and overseen by the CFTC and other such international equivalents of the CFTC with information sharing agreements with the U.S., as discussed in my answer to the previous question. This all presupposes however, that we have a CFTC engaged and with the leadership and resources to oversee domestic markets and develop the multinational agreements necessary to properly oversee these huge markets.

Thank you again for allowing me to participate in the activities of the subcommittee on this important issue. If there is ever anything else we can do to assist you and the subcommittee in its work please don't hesitate to contact us again.

Sincerely,

Eugene A. Guilford, Jr.
Executive Director

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ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives
Committee on Energy and Commerce
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September 3, 2008

The Honorable Walter Lukken
Acting Chairman and Commissioner
U.S. Commodity Futures Trading Commission
3 Lafayette Center
1155 21st Street, N.W.
Washington, D.C. 20581

Dear Chairman Lukken:

Thank you for appearing before the Subcommittee on Oversight and Investigations on Thursday, June 23, 2008, at the hearing entitled "Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II." We appreciate the time and effort you gave as a witness before the Subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from a certain Member of the Subcommittee. In preparing your answers to these questions, please address your response to the Member who submitted the questions and include the text of the Member's question along with each of your responses.

In order to facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business **Friday, September 19, 2008**. Your written responses should be delivered to **316 Ford House Office Building** and faxed to **202-225-5288** to the attention of Kyle Chapman, Legislative Clerk. An electronic version of your response should also be sent by e-mail to Mr. Kyle Chapman at **kyle.chapman@mail.house.gov** in a single Word formatted document.

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Kyle Chapman at (202) 226-2424.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigations

The Honorable John Shimkus, Ranking Member
Subcommittee on Oversight and Investigations

1. **Is "excessive speculation," as defined in the Commodity Exchange Act (CEA), limited to willful price manipulation on the part of individuals or groups of traders who are coordinating their activities which cause disorderly markets (e.g., "banging" the close)?**

The concepts of "excessive speculation" on the one hand, and "manipulation" on the other hand, are separate and distinct.

The term "excessive speculation" is not defined in the CEA. In particular, neither Section 1a of the CEA, 7 U.S.C. § 1a (which is the Definitions section of the statute), nor Section 4a(a) of the CEA, 7 U.S.C. § 6a(a) (which is the only section of the statute that uses the term) provides a definition.

Rather, CEA Section 4a(a) describes the effect of excessive speculation in terms of its burden on interstate commerce in a commodity. Under Section 4a(a), excessive speculation is deemed an undue and unnecessary burden on interstate commerce where the trading results in "sudden or unreasonable fluctuations or unwarranted changes in the price" of commodities underlying futures transactions.

Congress also specified in Section 4a(a) of the CEA what remedial limits may be imposed to diminish, eliminate, or prevent such a burden (for example, through speculative position limits). Pursuant to Section 4a(a), the CFTC has utilized its authority to set limits on the amount of speculative trading that may occur or speculative positions that may be held in contracts for future delivery. Moreover, CEA Section 5(d)(5), 7 U.S.C. § 7(d)(5), provides that an exchange, "[t]o reduce the potential threat of market manipulation or congestion, especially during trading in the delivery month . . . shall adopt position limitations or position accountability for speculators, where necessary and appropriate."

Thus, the CEA does not make excessive speculation a *per se* violation. This stands in contrast to manipulation, which is separately addressed in the statute. CEA Sections 6(c), 6(d) and 9(a)(2), 7 U.S.C. §§ 9, 13(a)(2), and 13b, specifically make it a statutory violation, for which the CFTC may bring an enforcement action, to manipulate the price of a commodity in interstate commerce or for future delivery.

Through enforcement actions taken against alleged manipulators over the years, the CFTC and the courts have established the elements that must be proved. Specifically, to sustain a charge of perfected manipulation, the CFTC must prove that: 1) the accused had the ability to influence market prices; 2) the accused specifically intended to do so; 3) artificial prices existed; and 4) the accused caused the artificial prices. *See, e.g., In re Cox,* [1986-1987 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 23,786 at 34,061 (CFTC July 15, 1987); *CFTC v. Enron Corp. and Shively,* 2004 WL 594752 *3, [2003-2004 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 29,714 (S.D. Tex. 2004) (motion to dismiss). Manipulation is prohibited whether a trader acts alone or engages in coordinated activity with other traders.

Because excessive speculation (as opposed to manipulation) is not a *per se* violation of the CEA for which enforcement action may be brought, there is no comparable body of case law or CFTC pronouncements regarding the elements of excessive speculation. Nor are we aware of any published interpretation as to whether some degree of willfulness or intent in particular is required. The CFTC and exchange position limits and position accountability levels that are called for by CEA Sections 4a(a) and 5(d)(5) do not draw any such distinction based on concepts of willfulness or intent.

2. **Does excessive speculation also encompass unintentional actions by speculators which cause price distortion because such investments are of sufficient magnitude and only on one side (e.g., solely long)?**

Please see answer to question no. 1.

3. **To cover the circumstances in question number two, would Congress need to provide the U.S. Commodity Futures Trading Commission (CFTC) with a broader definition of excessive speculation?**

Please see answer to question no. 1.

4. **A Statement of Administration Policy (SAP) on H.R. 6604, the Commodity Markets Transparency and Accountability Act of 2008, was issued on July 30, 2008. Did the CFTC contribute to or review the SAP before it was issued? Please explain the CFTC's specific activities in developing the SAP.**

The CFTC is an independent agency of the United States government established by statute. It provides technical staff assistance upon request to those serving in the Executive branch in the same manner as it provides technical staff assistance upon request to those serving in the Legislative branch. CFTC staff did provide technical staff assistance with respect to the above-referenced SAP.

5. **The SAP states, "the Administration is seriously concerned about section 14, which, based on an ambiguous definition of 'fungible' agreements, could require unprecedented new reporting requirements on certain over-the-counter (OTC) transactions."**

    a. **Is the term fungible currently used in the Commodity Exchange Act in sections 2(h)(7), 4g, and 4i?**

Yes.

    b. **Is the term fungible in these three sections of the CEA a "serious concern"?**

The term "fungible" in these three sections of the CEA is not a serious concern to the CFTC due to the targeted use of the term.

c. **If the answer to the previous question is no, please explain why this term is a serious concern in H.R. 6604.**

We cannot speak for the Administration. We note, though, that the reference to "serious concern" in the SAP appears to apply to section 14 of H.R. 6604 generally, rather than to the term "fungible" in particular.

In any event, with respect to the term "fungible," the same term is being used in different market contexts. The term "fungible" was added to CEA Sections 2(h)(7), 4g, and 4i, 7 U.S.C. §§ 2(h)(7), 6g, and 6i, by the CFTC Reauthorization Act of 2008, which was a part of the "Farm Bill" enacted earlier this year. Each of these three provisions refers to a transaction that can be cleared because it is treated by a derivatives clearing organization as "fungible" with a significant price discovery contract traded on an electronic trading facility. This is confirmed by the "Joint Explanatory Statement of the Committee of Conference," which explained that the provisions "make clear that in determining appropriate position limits or position accountability limits under [the CEA], an electronic trading facility shall consider cleared swaps transactions that are treated by a derivatives clearing organization as fungible with significant price discovery contracts."

In Section 14 of H.R. 6604, by contrast, the context is broader and less defined. It is ambiguous as to whether the term "fungible" means "cleared" as it does in CEA Sections 2(h)(7), 4g, and 4i. The fact that the bill neither says "cleared," nor refers to derivatives clearing organizations, suggests that something other than "cleared" may be intended – yet, little guidance is provided to the CFTC which would be responsible for defining the term.

6. **On October 19, 2007, Goldman Sachs wrote, "The increasing prevalence of futures contracts has transformed the nature of oil markets. It is no longer only about the value of oil as an energy commodity, but also... oil as a financial asset." As a matter of economic policy, is it the CFTC's policy to allow commodities essential to the economy, such as oil, to be priced as a financial asset—similar to gold—or should it be regulated in a way to ensure its price is dictated exclusively by supply and demand fundamentals?**

The CFTC is authorized by and charged with the enforcement of the Commodity Exchange Act. Under that statute the CFTC's mission is to protect market users and the public from fraud, manipulation, and abusive practices related to the sale of commodity and financial futures and options, and to foster open, competitive, and financially sound futures and option markets regardless of the underlying commodity.

7. **The International Monetary Fund's (IMF) *Regional Outlook* for May 2008 states, "It appears that speculation has played a significant role in the run up in oil prices as the U.S. dollar has weakened and investors have looked for a hedge in oil futures and gold. Producers, in particular, argue that fundamentals would yield an oil price of $80 per barrel, with the rest being speculative activity."**

   a. **Has the CFTC analyzed this IMF report?**

   Yes. Commission staff read the Report and discussed it with IMF staff.

   b. **Is the IMF in error when it reports the view of producers that speculation has played a significant role in the run up of oil prices?**

   CFTC staff met informally with IMF staff from the IMF research and capital markets groups and, among other things, noted the CFTC staff's disagreement with the Regional report's conclusions.

   c. **Has the CFTC consulted with the Organization of the Petroleum Exporting Countries (OPEC) and its member countries to assess their views on the role of speculation affecting oil prices?**

   No.

8. **Are the physical commodity futures markets too small to be used by institutional investors for trillion-dollar asset diversification strategies? Can these markets absorb unlimited amounts of capital without affecting the price of underlying commodities?**

Gross World Product for 2007 is estimated by the CIA at over $54 trillion and US GDP is about one quarter of that ($13.3 trillion in 2006). These figures represent the total value of goods and services produced by, respectively, the world and the US in the cited years. The notional value of physical commodities listed on U.S. futures exchanges is around $1 trillion, which amounts to less than 2% of goods and services produced worldwide in a single year.

Further, the $1 trillion figure needs to be understood in flow terms rather than in stock terms. Goods typically go from producer to consumer in a multistage process. As a commodity moves from producer to ultimate consumer, it is bought and sold multiple times, exposing each buyer and seller in the chain to possible losses. Hence, each stage of the merchandizing chain offers a potential hedging interest. For example, the elevator that purchases corn from a farmer, the feed lot that purchases that corn, as well as exporters and others each face the risk that the price of that commodity will fluctuate.

Futures provide a vehicle to manage this price risk and the same bushel of corn (working its way through the chain) might generate multiple futures contracts. Hence, the total notional value of futures contracts can easily exceed the total value of the commodity actually produced.

9. What is the size of the OTC markets in crude oil in the U.S.?

Because many OTC derivatives for crude oil are privately-negotiated away from regulated exchanges, it is difficult to estimate the total size of this market. In June 2008, however, the Commission issued a special call on OTC swap dealers compelling those dealers to participate in a survey of their OTC positions. This information was presented in a CFTC staff report on swap dealers and index traders (Swaps and Index Traders Report) for three separate dates—December 31, 2007, March 31, 2008 and June 30, 2008. The Commission believes it has captured a vast majority of OTC positions in commodity index positions.

As this report indicates, the notional value for these crude oil contracts on June 30, 2008 was $51 billion. However, that figure does not include OTC positions held by entities other than commodity index traders, such as single commodity swaps.

10. What is the legal basis for allowing a *bona fide* hedging exemption for swaps dealers who are laying off purely financial risk into the future markets (e.g., commodity-index investments)?

The legal basis of the bona fide exemption for swap dealers is derived from Commission Regulation 1.47(b)(2), which enables exemptions for such positions that are "economically appropriate to the reduction of risk exposure attendant to the conduct and management of a commercial enterprise." The Commission recently announced that it is reviewing this policy for granting exemptions for risk management purposes.

The *bona fide* hedge exemption treatment for risk management, first instituted in 1991, was in large part prompted by Congressional direction. Through the mid-1980's, the Commission strictly limited "*bona fide* hedging" transactions to transactions "normally represent[ing] a substitute for transactions to be made or positions to be taken at a later time in a physical marketing channel."[1] During that time period, however, derivatives trading and risk management practices began to evolve considerably and this aspect of the hedging definition proved to be ill-fitted to the economic realities of financial futures because portfolio managers utilize financial products to add incremental income to managed assets, to manage risk, or to rebalance a portfolio. These financial futures positions typically are taken as an alternative to cash market transactions (in view of their lower transaction costs, speed, and minimal price impact), rather than as a temporary substitute for positions that will later be taken in the underlying cash market.

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[1] 17 CFR 1.3(z)(1).

In 1986, Congress directed the Commission to keep the hedging definition consistent with evolving industry needs and practices. In response to concerns regarding artificial restraints on investment decisions imposed by position limits, the House Committee on Agriculture, in its Report accompanying the Commission's 1986 reauthorization legislation, instructed the Commission to re-examine its approach to speculative position limits and its definition of hedging.[2] Specifically, as to the hedging definition, the House Report "strongly urge[d] the Commission to undertake a review of its hedging definition. . . and to consider giving certain concepts, uses, and strategies 'non-speculative' treatment . . . whether under the hedging definition or, if appropriate, as a separate category similar to the treatment given certain spread, straddle or arbitrage positions ...."[3]

Subsequently, the Senate Committee on Agriculture, Nutrition, and Forestry, in its Report on the 1986 reauthorization legislation, "urge[d] the Commission to undertake a review of its hedging definition for the purpose of ensuring that the definition is, in fact, consistent with the legitimate needs and practices of the industry."[4] The Senate Committee specified that, as part of this review, the Commission should consider "whether the concept of prudent risk management [should] be incorporated in the general definition of hedging as an alternative to the risk reduction standard."[5]

In view of the direction from its authorizing committees to review its hedging definition to ensure that the definition was consistent with the current needs and practices of the industry, the Commission tasked its Financial Products Advisory Committee (FPAC) to deliberate on the issue and provide the Commission with recommendations. In 1987, the FPAC completed its review and unanimously voted to provide the Commission with a detailed report recommending an updated approach to evaluating *bona fide* hedging activities. The Commission staff then issued interpretive statements directing that "risk-management" be included as a type of speculative position limit exemption.[6]

11. **How many sovereign-wealth funds are investing in oil futures through swap dealers? What is the size of their holdings in the West Texas Intermediate (WTI) crude oil contract?**

The Swaps and Index Traders Report identified sovereign wealth funds (SWFs) in two ways. The first was as a class of traders participating in commodity index trading. These results show that, on June 30, 2008, SWFs held 9% of the notional value of index trading in U.S. markets. The second manner in which SWFs were identified was as a specific client of an index fund with $100 million or more invested or as a client of a swap dealer whose equivalent futures position was 25% or more of a single-month position limit or accountability level. The report described the findings as follows:

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[2] H.R. Rep. No. 99-624, at 44-46 (1986).
[3] *Id.* at 46.
[4] S. Rep. 99-291, at 22 (1986).
[5] *Id.*

[6] *Risk Management Exemptions from Speculative Position Limits Approved under Commission Regulation 1.61*, 52 FR 34633 (September 14, 1987); *Clarification of Certain Aspects of the Hedging Definition*, 52 FR 27195 (July 20, 1987).

> The 9 percent of commodity index notional value held by sovereign wealth funds was analyzed further by the types and locations of entities in that category. For clients of index funds with $100 million or more invested, four entities were identified as sovereign wealth funds: 2 separate pension funds run by a European government; 1 fund in the name of a North American government; and 1 fund in the name of a European city. None of the 4 was identified with a futures-equivalent position over a position limit or accountability level. For single-commodity clients of swap dealers, 6 entities that appear to be sovereign wealth funds were identified as above the threshold levels described earlier (i.e., total all-months gross futures equivalent position of 25 percent or more of a single-month limit or level). Three of these were North American, 1 was European, and 2 were Asian.

12. How many staff does the CFTC have overseeing activities on the New York Mercantile Exchange (NYMEX)?

CFTC staffing is not organized by exchange. Rather, it is organized into Divisions with specific areas of expertise, including the Office of the Chief Economist, the Division of Market Oversight, the Division of Clearing and Intermediary Oversight, the Office of the General Counsel, and the Division of Enforcement. Staff within these Divisions may not be always assigned to particular exchanges or firms.

The Commission program that is most directly involved in oil market issues is the Division of Market Oversight (DMO) surveillance program. Four economists are assigned to the oil complex as part of their surveillance responsibilities. In addition, supervisors and support staff also work on assignments that involve the oil complex. These market surveillance professionals closely and continuously monitor trading activity in the petroleum futures markets in order to detect and prevent instances of possible price manipulation.

In addition, the Division of Enforcement (DOE) has a successful history of investigating and prosecuting energy cases. It currently has more than a dozen ongoing crude oil manipulation investigations. In the process of investigating energy cases, DOE trains its professionals on the various nuances of the market. Furthermore, in certain situations, DOE hires professional experts to assist in fully exploring both physical and derivative trading issues.

In other Divisions, staff work on a range of different market issues, including issues involving crude oil. Generally speaking, the CFTC employs a number of economists, surveillance experts, attorneys, enforcement investigators, and IT professionals who collectively work on crude oil market issues such as surveillance, new product approval, financial integrity, data gathering and analysis, and enforcement.

It should be noted that the CFTC has requested additional resources from Congress to devote more staff to the oversight of these markets, including the crude oil markets.

13. The IntercontinentalExchange, Inc. (ICE) testified there are only two staff members at the Financial Services Authority (FSA) monitoring ICE Futures energy commodity trading. Is that large enough to oversee ICE's oil trading?

The CFTC surveillance staff is receiving full cooperation and all of the trade data that has been requested from FSA surveillance staff pursuant to the enhanced reporting provisions of the Ice Futures Europe no-action letter.

14. Please respond to the following series of questions.

a. What is the amount of open interest for the West Texas Intermediate (WTI) futures contract, the Heating Oil futures contract, and the Reformulated Blendstock for Oxygen Blending (RBOB) gasoline futures contract traded on NYMEX on August 1, 2008?

WTI	1,253,756 contracts
Heating Oil	258,530 contracts
RBOB gasoline	258,530 contracts

b. What is the amount of open interest for the WTI futures contract, the Heating Oil futures contract, and the RBOB gasoline futures contract traded on ICE Futures Europe on August 1, 2008?

WTI	478,560 contracts
Heating Oil	3,773 contracts
RBOB gasoline	509 contracts

c. What is the ratio of ICE Futures Europe to NYMEX total open interest for these three contracts?

Response:	WTI	38 percent
	Heating Oil	1.4 percent
	RBOB gasoline	0.2 percent

Summary by commodity:

For WTI crude oil, as of August 1 2008, the Light Sweet Crude Oil (WTI) futures contract traded on ICE Futures Europe had an open interest in all futures and options months combined of 478,560 contracts. That represented 38 percent of the open interest on NYMEX (1,253,756 contracts).

For heating oil, as of August 1 2008, the NY Harbor Heating Oil Light futures contract traded on ICE Futures Europe had an open interest in all months combined of 3,773 contracts. That represented 1.4 percent of the open interest on NYMEX (265,364 contracts).

For RBOB gasoline, as of August 1 2008, the Gasoline Blendstock (RBOB) futures contract traded on ICE Futures Europe had an open interest all months combined of 509 contracts. That represented 0.2 percent of the open interest on NYMEX (258,530 contracts).

d. What is the speculative-position limit and accountability levels for the WTI futures contract, the Heating Oil futures contract, and the RBOB gasoline futures contract traded on NYMEX?

The speculative limits and accountability levels are shown in the table below (in contracts).

Futures Contract	Spot Month Limit	Single - Month Accountability Level	All-Months-Combined Accountability Level
Crude Oil	3,000	10,000	20,000
Heating Oil	1,000	5,000	7,000
RBOB Gasoline	1,000	5,000	7,000

e. What is the basis for setting these position limits on NYMEX? Are these position limits a function of the percentage of open interest the 3 days prior to the settlement date?

Spot month speculative limits are not based on open interest levels. Spot-month speculative position limits are intended to minimize the threat of manipulation caused by traders attempting to corner or squeeze the market. They are based on estimated deliverable supplies of the underlying commodity in the expiring contract month, and are intended to limit the size of a position that an individual trader can hold going into the delivery period.

f. **What is the basis for calculating the single-month accountability level and all- month accountability levels? Is this a function of the amount of open interest?**

The single-month and all-months-combined accountability levels are set based on levels of open interest in the lead month and in all-months-combined, respectively.

g. **As part of the CFTC's "no-action" letter issued to ICE Futures Europe on June 17, 2008, what are the proposed speculative-position limits and accountability levels for the WTI futures contract, the Heating Oil futures contract, and the RBOB gasoline futures contract?**

In June, 2008, the CFTC announced that ICE Futures Europe and other similar foreign exchanges would have to impose position limits and accountability levels on their U.S.-linked futures contracts as a condition for U.S. access. Effective October 14, 2008, ICE Futures Europe implemented position limits and accountability levels on all four contracts that are linked to contracts traded on NYMEX. Those position limits and position accountability levels are identical to those of the NYMEX contracts against which the ICE Futures Europe linked contracts settle.

h. **Why has the CFTC not required that the position limits and accountability level be set as a percentage of open interest, as a condition of the no-action letters issued to ICE Futures Europe or the Dubai Mercantile Exchange?**

As noted above, spot month limits are more appropriately set based on deliverable supplies of the underlying commodity or the potential for distortion of the cash settlement price, which is unrelated to overall open interest. With respect to accountability levels, Commission staff believes that, in such linkage situations, positions and trading activity in the linked contract can influence pricing in the reference contract. Essentially, there is a single market for the contract and, accordingly, Commission staff believes that irrespective of where a position is established – NYMEX, ICE Futures Europe or DME – all participants in this single market should be subject to comparable position limit /accountability levels. Because the ICE Futures Europe and DME contracts are part of this larger single market, Commission staff believes that it is appropriate for them to set their position limits in accordance with conditions in the larger market rather than just referencing the conditions of their own contract, such as open interest. Moreover, setting levels based on open interest is problematic from an administrative standpoint as these levels can change frequently and would be impossible to implement for new or nascent markets, which have no or little open interest.

i. **Given that NYMEX open interest for WTI is approximately triple the open interest on ICE, what analytical studies were performed by the CFTC which justify setting the same position limits and accountability levels for ICE Futures Europe and NYMEX?**

As explained above in 14h, open interest is not the relevant factor in setting speculative limits or accountability levels for the ICE Futures Europe contracts.

j. **Assuming the Dubai Mercantile Exchange commences trading the WTI futures contract, and its open interest is only 50,000 futures contracts, on what basis is the CFTC justified in setting an all-month accountability level equal to 40 percent of all-open interest?**

See the responses to 14e and 14h above.

15. **On June 20, 2008, the *Financial Times* reflected business community objections to the recent CFTC requirement that ICE Futures Europe apply U.S.-position limits on its exchange for contracts that are linked to U.S. markets. The article states, "The FSA must now decide whether to put the change out for market consultation - or to consider whether it has grounds to veto the change, under the "Balls clause," introduced by the U.K. parliament to ring-fence the City from unwanted U.S. regulation."**

a. **If the "Balls Clause" is invoked to invalidate the extra requirements of the CFTC's June 17, 2008, no-action letter to impose position limits and U.S.-style reporting requirements, will the CFTC require ICE Futures Europe to offer its look-alike contracts for energy on a U.S.-registered contract market?**

If the FSA were to invoke the *Balls Clause* and prevent Ice Futures Europe from implementing the extra requirements of the CFTC's June 17, 2008, no-action letter, Ice Futures Europe would not be in compliance with the express terms of the no-action letter. As a result, Ice Futures Europe could not rely on the staff determination that it was a *bona fide* foreign board of trade.

We note, however, that Ice Futures Europe has agreed to the position limits and reporting requirements of the amended no-action letter and FSA has been fully cooperative in providing information.

16. **What is the rationale behind the CFTC's continuing to classify the positions of swap dealers with purely financial risk in commodity-index investments in the same commercial category such as oil companies who are hedging physical risk?**

As part of its Swaps and Index Traders Report, the Commission recommended reviewing the classification of index traders and the basis for granting hedge exemptions for risk management. For a historical rationale for allowing such exemptions, please see question #10.

17. The CFTC recently reclassified a major oil-futures participant as a noncommercial instead of commercial participant because of data obtained through its May 29, 2008, Special Call.

a. What specifically was this company doing in the market that caused the CFTC to reclassify their activities?

The reclassification was not prompted by any market action taken by this company. The company was contacted as part of the data gathering for the Swaps and Index Traders Report, in which the CFTC staff learned that their futures positions were not hedging swaps but a proprietary spread position.

b. What is the size of the open interest in WTI held by this misclassified trader? What percentage of open interest in the WTI contract did this participant hold?

As of July 15, 2008, the misclassified trader had 326,649 long contracts and 330,742 short contracts in NYMEX WTI crude oil. Those futures and delta-adjusted option positions account for about 11 percent of total open interest.

c. Did this participant have positions in other energy commodities? If so, which contracts and in what amounts?

The table below lists futures and delta-adjusted option positions held by the misclassified trader in other energy commodities as of the close on July 15, 2008.

		Futures and Delta-Adjusted Options	
Exchange	Contract Market Name	Long	Short
NYME	No. 2 Heating Oil, New York Harbor	1,411	3,003
NYME	European Style Heating Oil Options	1,917	262
NYME	Heating Oil Financial Futures	100	100
ICE	Natural Gas ICE	21,172	40,302
NYME	Henry Hub Gas Swap	340	8,137
NYME	European Style Natural Gas Options	31,806	8,874
NYME	Natural Gas	7,747	21,255
NYME	Henry Hub Penultimate Gas Swap	0	16,656
NYME	M-3 Basis Swap	3,388	0
NYME	Dominion Basis Swap	736	0
NYME	Transco Zone 6 Basis Swap	2,117	0
NYME	Henry Hub Basis Swap	3,680	0
NYME	Columbia Gulf Onshore Basis Swap	5,292	0
NYME	Natural Gas Cal Spread Options	0	769
NYME	TETCO East Louisiana Swap	0	736
NYME	PJM Electricity Monthly	1,129	960
NYME	European Style Crude Oil Options	11,214	16,448
NYME	WTI Crude Oil Financial	7,328	15,432
NYME	WTI Crude Oil Calendar Swap	17,565	5,025
NYME	Crude Oil Calendar Spread Options	45,238	14,780
NYME	RBOB Unleaded Gasoline	1,896	2,795
NYME	RBOB Gasoline Financial	310	0
NYME	European Style RBOB Look-Alike Options	1,113	482

d. Since this misclassification, please provide a revised estimate of the share of open interest in WTI held by swap dealers, commercials, and noncommercials as of January 2000 and April 2008.

The table below shows futures and delta-adjusted option combined positions and the percentage of open interest held by swap/derivative dealers, commercials, and non-commercials on the selected dates.

		Futures and Delta-Adjusted Options				
Report Date	Classification	Long	% of OI	Short	% of OI	Total Open Interest
8/29/2003	Swaps/Deriv Dealer	230,296	30%	295,020	39%	758,671
	Commercial	220,486	29%	227,802	30%	
	Non-Commercial	248,671	33%	176,802	23%	
1/31/2008	Swaps/Deriv Dealer	936,893	35%	891,961	34%	2,655,292
	Commercial	373,844	14%	520,314	20%	
	Non-Commercial	1,271,573	48%	1,170,741	44%	
4/30/2008	Swaps/Deriv Dealer	963,803	33%	967,781	33%	2,920,026
	Commercial	395,857	14%	498,753	17%	
	Non-Commercial	1,483,932	51%	1,372,570	47%	

Data on the requested date of January 2000 was not provided due to two factors:

- Until recently, the Commission's data base did not keep records of historical changes to the commercial usage categories (such as swap dealer), thus any Swaps/Derivates Dealer classification data for periods more than one year ago may be problematic but would likely be for up to five years..
- Option delta factors were not available from NYMEX in January 2000

18. Lehman Brothers, a major Wall Street commodity dealer, issued a special report in May 2008 entitled, "Oil Dot Com," which reported on its study of index investing and oil prices. Lehman staff calculated that during the first quarter of 2008 there was a 1.6- percent increase in the price of oil for every $100 million invested in new inflows into commodity-index investments. Lehman's oil price analyst Ed Morse wrote, "Our conclusion from this study is that we are seeing the classic ingredients of an asset bubble. Financial investors tend to 'herd' and chase past performance, comforted by the growing analytical conclusion that markets are tightening, and new inflows, in turn, drive prices higher. Larger allocations by institutional investors, including new sovereign wealth funds desiring to increase their commodity exposure, play a role."

a. Does the CFTC agree with the Lehman report? If not, please specify the errors in Lehman's report?

The "herding" described in the statement is one marker for existence of a speculative bubble. Hence, insofar as that part of the statement is concerned the Commission can agree with the statement. However, another indicator for presence of a speculative bubble—inventory accumulation—is lacking.

Disagreements about the proper characterization of today's market aside, the Commission recognizes the significant impact of commodity price increases on business and household budgets and is cognizant that problems such as excessive speculation can occur in futures markets. The Commission continues its close monitoring of the market situation.

b. The CFTC issued an "Interim Report on Crude Oil" on July 22, 2008, which concluded, "there is no statistically significant evidence that the position changes of any category or subcategory of traders systematically affect prices. This is to be expected in well-functioning markets. On the contrary, there is evidence that non-commercial entities alter their position following price changes. This is also expected because new prices convey information affecting the prospects and the risks of those entities." As the Interagency Task Force developed this Interim Report, did it assess the "Oil Dot Com" report and review the methodology used by Lehman?

Staff reviewed the Lehman report, but did not use the Lehman methodology.

c. Does the CFTC consider noncommercial entities to include index investors?

Commodity index traders who enter futures markets directly should be, and are currently, classified as non-commercial. More commonly, however, commodity index traders place their positions through commodity swap dealers in the OTC market. Those swap dealers maintain what are called "matched books" meaning that they do not take on price risk. Hence, the OTC positions taken on by swaps dealers are offset first with other OTC swaps positions and then with futures contracts. This offset activity implies that swaps dealers are price neutral—they neither gain nor lose from either price increases or decreases. Owing to their price neutrality, the Commission categorizes swaps dealers as commercial entities--the classification generally afforded to hedgers. In its Swaps Report, the Commission recommended a review of these categories, including reclassifying swap dealers as a separate category.

d. If the answer is yes, please explain how index investing is a price-sensitive investment model, as opposed to an asset-allocation model, which operates on the buy-and-hold principle without regard to the specific price on any given day.

The Commission cannot speak to the motivations underlying the investments of every participant in commodity indexes. "Asset-allocation" is the model most often used to explain the role of these funds. That model implies that the usefulness of commodity exposure comes through the reduction in portfolio risk. Many examples demonstrate that very significant risk reductions are obtained by adding relatively small proportions (under 10%) of commodity exposure. This exposure can be obtained through exchange-traded funds (ETFs, primarily for metals) or investment in commodity index funds.

Some argue that the passive nature of commodity indexes creates an upward price pressure. This argument suggests that long positions in futures contracts are equivalent to buying and holding the commodities that underlie these futures markets. This is not the case as the futures contracts involved are closed out prior to delivery and do not affect aggregate consumption. Hence, commodity index funds have no effect on supply and demand fundamentals for the underlying commodity.

The possibility does remain that trades placed by commodity index traders are incorrectly seen as conveying information about market conditions. The concern that this may be the case prompted close study of the effects from participation by commodity index traders on prices. Multiple tests for Granger causality (a statistical measure that might help to signal causality) have been conducted over the last year. In no case has the Office of the Chief Economist found those positions to be causing price changes. Those tests will continue. The Office of the Chief Economist continues to apply additional testing procedures to existing data and seeks for ways to improve on and supplement data collection on various fronts.

19. In his testimony, Mr. Masters estimates that about 1 percent—or $260 billion—of the funds held by institutional investors have been put into long-term, long-only commodity- index investments through transactions on both regulated and

unregulated OTC markets. The Goldman Sachs Commodity Index has about 78 percent of its investments in energy. The Dow Jones-AIG Commodity index has about 33 percent in energy.

a. Has there been any effect on prices for oil, gas, or other energy futures arising from index investments?

The Swaps and Index Traders Report revealed that commodity index investments stood at just $200 billion as of June 30, 2008 and that index investors have been reducing the number of futures-equivalent positions in crude oil from December 31, 2007 through June 30, 2008. It is difficult to connect net decreases in positions with the price increases that occurred concurrently. Whereas it is true that the net notional value of index investments in crude oil has risen, this increase is driven by prices, not by positions.

Nevertheless, multiple tests for Granger causality have been conducted over the last year. The most up-to-date of these were published on July 18, 2008 in the Interim Report of the Interagency Task Force. In no case has our Office of the Chief Economist found those positions to be causing price changes. Those tests will continue. The Office of the Chief Economist continues to apply additional testing procedures to existing data and seeks for ways to improve on and supplement data collection on various fronts.

b. If the amount of index investments was to increase from $260 billion to $1 trillion (an increase from 1 to 4 percent of investable institutional assets), could this increase affect futures prices of energy commodities? How large is the potential effect, all else being equal?

The Commission's recent survey has obtained the most complete evidence available on these markets. Based on that survey, commodity index investment totals on June 30, 2008 were just under $200 billion of which $39 billion are funds placed outside the United States. Much of the remaining $161 billion remains in OTC markets and is not invested in futures markets, the primary price discovery venue. Of that $161 billion, $51 billion are invested in crude oil. This is approximately 13% of the $405 billion notional value of NYMEX crude oil positions on that date.

Projecting a four-fold increase from the Commission's survey results would be difficult. New money entering commodity index funds could have an effect, but the Commission knows of no sound analytic methods to determine the effect such an increase may have.

c. According to the CFTC, is there any level at which index investments could create an "elephant-in-the-bathtub" problem and drive prices higher for energy futures? Where is that tipping point?

It is not the total value of positions that might affect market prices; it is the extent of trading activity. The Commission's survey indicated a notional value of $161 billion for commodity index funds on U.S. futures exchanges. That figure represents the current value of positions previously established and is the sum of: (1) gains realized on positions established earlier and (2) new investment flows into these funds. Our survey results indicate that most of the increase stems from price increases.

As new money comes into the funds and they open new positions to gain exposure to price changes in crude oil, trading activity does occur. Should the markets incorrectly infer that those positions constitute information about supply and demand fundamentals, those flows could result in price distortions. The Commission monitors continuously for indications that the trading activities of one or more entities may be pushing prices.

d. Has the CFTC analyzed the bid-ask spreads over the past year for WTI to assess whether the influx of index investments is affecting the price of futures? Please provide a summary of this analysis and describe the specific bid-ask data that was reviewed.

Impacts on bid-ask spreads have not been closely studied. Those impacts would be of concern to traders, as a high bid-ask spread may imperil liquidity and deter participation in the futures markets. The Commission has not been receiving complaints from traders about bid-asked spreads widening or liquidity be harmed by bid-asked spreads or indications that participation has been deterred by high bid-asked spreads. Accordingly, the Commission has no near-term plans to formally study bid-ask spreads.

20. How large is the U.S.-based OTC market for energy commodity derivatives such as oil or gas? How does this compare with open interest on NYMEX?

The Swaps Index Traders Report found that the combined values of OTC and futures exchange position in crude oil contracts on June 30, 2008 came to $51 billion net notional value. This is approximately 13% of the notional value of all outstanding NYMEX futures contracts on that commodity.

21. Why does the CFTC not require regular reporting of large-trader positions in the OTC market for derivatives tied to oil, gas, and other kinds of energy? Does the CFTC need additional legal authority to achieve this requirement? Please provide the draft legislative language required.

The Commission's authority for the establishment of a large trader reporting regime is derived from CEA Section 4i, which bases the reporting requirement on large positions held on regulated markets (e.g., designated contract markets, derivatives transaction execution facilities and exempt commercial markets with significant price discovery contracts). The Commission would need additional authority to impose a large trader reporting regime on OTC transactions based on energy commodities.

22. Is there arbitrage between the OTC markets and the cash markets for energy commodities? Please explain what data the CFTC use to inform its answer.

The Commission does not routinely seek out the underlying motivation for non-commercial trading activity. In the case of trading activity by commodity index traders and swap dealers, arbitrage is not likely. Commodity index traders seek to replicate the price changes of various indices of commodity prices. Profits or losses incurred in any arbitrage activities would lessen their effectiveness in tracking those indices. Swap dealers, because they seek to avoid price exposure, would not generally enter into arbitrage positions that would lead to their having exposure to price changes.

However, it is likely that the activities of both commodity index traders and swap dealers do at times create arbitrage opportunities. Any time liquidity or other factors affect prices in one market without affecting the prices in corresponding markets elsewhere, an arbitrage opportunity is created. So it is very likely that the activities of both swap dealers and commodity index traders do increase the extent of arbitrage activity. The activity of those arbitrageurs then brings prices back into line, insuring that at most points in time that all prices convey the same information.

23. Please quantify the dollar volume or quantity of contracts that are arbitraged between the OTC markets and the cash market for crude oil.

The Commission does not have this information.

24. What percentage of swaps transactions involving the WTI contract is transacted on NYMEX? What percentages are transacted on ICE? What percentage is netted out by the swaps dealers?

The special call for the Swaps and Index Traders Report was not designed to answer those questions, nor does the data collected shed light on the answers. Since these markets are closely linked, it is likely the percentages will vary from day-to-day, depending upon which market offered the best execution at the time the trade needed to be made.

25. What percentage of swaps transactions involving the WTI contract is transacted on ICE Futures?

The special call for the Swaps and Index Traders Report was not designed to answer that question, nor does the data collected shed light on the answer. Since these markets are closely linked, it is likely the percentages will vary from day-to-day, depending upon which market offered the best execution at the time the trade needed to be made.

26. Do OTC market transactions in WTI affect price discovery on NYMEX?

A potential does exist for OTC transactions to affect prices for contracts listed on futures exchanges, particularly in those instances where there is some sort of direct linkage between OTC transactions and NYMEX. For example, trading in natural gas on the Exempt Commercial Market (ECM) operated by the Intercontinental Exchange (ICE) is contractually linked to prices on the NYMEX natural gas contract. Under the amendments to the CEA enacted this summer as part of the 2008 Farm Bill, ECM contracts with a significant price discovery role will be subject to CFTC surveillance regulations like contracts trading on NYMEX. Similarly, for linked contracts listed by Foreign Boards of Trade, the Commission conditioned its direct access relief to the affected foreign exchange's acceptance of limits on speculative trading and the sharing of information on large traders in the contract. Furthermore, the Swaps Report released this summer found swaps dealers offsetting their net commodity price exposure through OTC contracts with hedging in exchange traded futures including WTI on NYMEX. While less formal than direct linkages discussed above, the trading by swaps dealers in the two markets is a link between the markets and can affect prices. In response to potential affects on the regulated market by the unregulated market the Commission made several recommendations in the Swaps Report, which are listed below in response to question #28.

27. Do OTC market transactions in WTI affect price discovery on cash markets?

Because transactions in futures markets are generally much less costly than comparable transactions in cash markets, price discovery very often occurs on futures exchanges. Hence, futures prices affect cash market prices. Should the circumstances outlined in the prior question arise, then OTC transactions could affect cash market prices.

28. Would the CFTC support legislative authority to monitor regularly the off-exchange, OTC swaps transactions for "standardized contracts" (such as the International Swaps and Derivatives Association, Inc. (ISDA) swaps/annexes) where the price is linked to a NYMEX contract? You testified previously that this would overwhelm the agency. Is that still your view?

The CFTC made a number of recommendations in its September 15th Swaps and Index Traders Report, several of which involve swap dealers. The Commission recommendations would increase the transparency, reporting and oversight of swap dealer activity. The recommendations include:

1. Removing swap dealers from the commercial category in the Commitments of Traders Reports and create a new swap dealer classification for reporting purposes.

2. Developing and publish a new periodic supplemental report based on OTC swap dealer activity.

3. Creating a new CFTC Office of Data Collection, whose sole mission is to collect, verify, audit, and publish all the agency's commitments of traders information.

4. Establishing more detailed reporting standards for certain large traders on regulated futures exchanges to ensure a more precise picture of their trading activity.

5. Consideration of elimination of *bona fide* hedge exemptions for swap dealers and the creation of a new, limited risk management exemption.

6. Requesting increased funding to successfully implement the above recommendations, along with additional funding sufficient to meet current mission requirements and any other additional responsibilities given to the agency.

7. Continuing to encourage the clearing of OTC transactions.

8. Conducting a review of swap dealers' futures trading activity to ensure that it is sufficiently independent of any affiliated commodity research.

29. If the answer to question 28 is no:

a. What kind of staff and budget resources would be required?

While we do not yet have a budget estimate for implementation of these recommendations, it is fair to say that if implemented, the agency would require additional staff and resources above our current request of $157 million.

b. The CFTC has concluded that oil price increases are not related to speculation in commodity futures markets. How can the CFTC draw this conclusion when it is only looking at a small fraction of the transactions in these commodities?

The CFTC sees all of the transactions in contracts for crude oil futures traded on DCMs, including the identities of traders holding more than 90% of the open positions. Trading on Exempt Commercial Markets in contracts that play a significant price discovery role will be much more transparent as a result of recommendations made by the CFTC last year and adopted this year by Congress as part of the 2008 Farm Bill. The trading in crude oil futures on Foreign Boards of Trade such as ICE Futures Europe will be much more transparent to the Commission as a result of initiatives we have taken this year. The Commission's access to information about the positions in OTC derivatives markets of Large Traders in regulated futures markets was improved last year by the amendment of Commission regulation 18.05. The transparency of the OTC derivatives markets will be further improved once the recommendations from the Swaps Report are adopted. Taken together the Commission has worked diligently over the past year to significantly increase transparency of markets related to trading on regulated DCMs.

The Commission does not have direct access to information about OTC derivatives that don't have a connection to the futures markets, nor would it have direct access to information about transactions in the cash markets, spot or forward, for crude oil absent some link to futures trading on a DCM. The CFTC allocates its limited resources to areas having the greatest impacts on the price discovery function of futures markets. Our mandates specifically mention markets where price discovery occurs, instruments used for hedging purposes and activities that may harm small investors. The markets mentioned in this question are rarely considered to be venues for price discovery activities and involve contracts undertaken by sophisticated investors. The valuations applied in the OTC markets are often obtained from futures markets that we do oversee. Hence, directing Commission resources to recognized price discovery venues has generally proven to be a successful approach.

c. If the CFTC does not want this authority, should Congress try to find or create a different agency that would welcome this challenge?

The CFTC will execute and uphold all statutory requirements as directed by Congress, but would require commensurate staffing and resources if it is given additional responsibilities.

30. Witnesses on the first panel at the June 23, 2008, hearing recommended Federal position limits for energy derivatives, pegged to an overall ceiling on the level of speculation deemed necessary by those hedgers who are predominantly producers or users of physical commodities. They also recommended CFTC regulation of standardized, bilateral swaps for energy. Do you agree with these two recommendations? If not, why not?

In its ECM report to Congress last fall, the CFTC recommended that energy swap contracts that serve a "significant price discovery" function should be subject to additional oversight and position limits. Furthermore, in its Swaps report, the Commission recommended a review of whether swap dealers should be granted hedge exemptions from speculative position limits. In both cases, the CFTC believes that additional oversight and controls of OTC derivatives may be appropriate when a direct pricing link exists that may impact the central price discovery role of the futures markets.

31. The Farm bill narrowed the "Enron loophole" to bring certain energy futures contracts under CFTC regulation. How many contracts will be covered under this new law? Is it limited solely to the natural gas look-alike contract? If not, what other contract will the CFTC recommend to designate as a significant price-discovery contract?

The Farm Bill did create new self-regulatory obligations for exempt commercial markets ("ECMs") (and new parallel authorities for the Commission) when they list contracts that the Commission determines to be significant price discovery contracts ("SPDCs"). As mandated by the Farm Bill, the Commission is currently drafting a proposed rulemaking that would effectuate these new requirements, including an elaboration on how the Commission would analyze whether an ECM contract is an SPDC. Consistent with the Farm Bill's deadlines, the Commission fully expects to issue this proposed rulemaking by November 18, 2008, and a final rulemaking by February 16, 2009. In light of the pending status of this rulemaking, the Commission is unable to state at this time whether any one particular ECM contract will be considered an SPDC or how many ECM contracts will be considered SPDCs.

32. In a June 20, 2008, letter to this Committee, the CFTC indicated that it is only aware of one sovereign-wealth fund transacting on U.S.-futures markets. What specifically is the CFTC doing to quantify the participation of sovereign-wealth funds in energy markets through swap dealers or other intermediaries which do not appear in the CFTC's large- trader reporting system?

The special call to swaps dealers and index funds for the Swaps and Index Traders Report was specifically designed to identify SWFs in two ways. The first was as a class of traders participating in commodity index trading. These results show that, on June 30, 2008, SWFs held 9% of the notional value of index trading in U.S. markets. The second manner in which SWFs were identified was as a specific client of an index fund with $100 million or more invested or as a client of a swap dealer whose equivalent futures position was 25% or more of a single-month position limit or accountability level. The report described the findings as follows (at page 22):

> The 9 percent of commodity index notional value held by sovereign wealth funds was analyzed further by the types and locations of entities in that category. For clients of index funds with $100 million or more invested, four entities were identified as sovereign wealth funds: 2 separate pension funds run by a European government; 1 fund in the name of a North American government; and 1 fund in the name of a European city. None of the 4 was identified with a futures-equivalent position over a position limit or accountability level. For single-commodity clients of swap dealers, 6 entities that appear to be sovereign wealth funds were identified as above the threshold levels described earlier (i.e., total all-months gross futures equivalent position of 25 percent or more of a single-month limit or level). Three of these were North American, 1 was European, and 2 were Asian.

a. Given the lack of data at the Commission level, is it appropriate to issue an additional Special Call to fully identify the extent of sovereign-wealth fund

involvement in U.S.-commodity markets and foreign boards of trade with no-action letters? If not, why not?

Those SWFs that hold futures positions directly in U.S. markets are already fully identified through the Commission's large-trader reporting system. The Commission is generally satisfied that its special call to swaps dealers and index funds for the Swaps and Index Traders Report identified the level of involvement of SWFs and identified any SWF of significant size that participates indirectly in U.S. futures markets—either through an index fund or through a swap dealer. The relatively small numbers of reported SWFs does not justify setting up additional reporting apparatus.

33. H.R. 6604 authorizes 100 additional CFTC staff. Does the CFTC have a personnel ceiling? What is the CFTC's current personnel ceiling in numbers of full-time equivalents?

The Commission's FY 2008 Budget provides for 465 FTE. The President's FY 2009 Budget of $130 million supports 475 FTE and the Senate Mark of $157 million supports 596 FTE.

34. What is the estimated cost on an annual basis of funding these 100 additional positions?

It would cost around $17 million for salary and benefits alone.

35. CFTC has requested additional funding to deal with the mismatch between staff levels, which have declined to a record low, while the agency faces skyrocketing trading volumes and demands on its staff. The Office of Management and Budget (OMB) proposed a user fee on each trade to help fund the CFTC. The Congressional Research Service estimates this fee would cost about 3 cents per contract per side. The Securities and Exchange Commission has a user fee on stock transactions.

a. Has the CFTC analyzed the cost per transaction per side of the OMB proposal? What is the estimated cost per trade to fund 100 percent of CFTC's budget?

The Commission has not recently estimated the cost. When OMB first proposed the fee in January, the Commission estimated that the fee would cost between 2 to 3 cents per round-turn contract to fund the $96 million proposed for non-Enforcement programs in the President's FY 2009 Budget for the CFTC.
When OMB first proposed the fee in January, the Commission estimated that the fee would cost between 3 to 4 cents per round-turn contract to fund the $130 million proposed in the President's FY 2009 Budget for the CFTC.

b. **Why is the CFTC not willing to endorse a user fee for at least part of its budget?**

The Commission, as a whole, has not taken an official position on user fees. Given the CFTC's serious funding needs, I encourage Congress to consider all available options for funding the agency, including a user fee. Such a fee would require the CFTC's authorizing committees to change the CFTC's statute.

c. **Could the user fee be targeted to very large traders as a way to mitigate the cost to smaller traders?**

The Commission has not studied the feasibility or the merits of such a proposal.

d. **If the regulated community supported this fee, would the CFTC be willing to change its views?**

Given the CFTC's serious funding needs, I encourage Congress to consider all available options for funding the agency, including a user fee.

e. **Why is it equitable for taxpayers be asked to cover 100 percent of the cost of policing the activities of speculators and investment banks, when a very small fraction of U.S. taxpayers actually trade on the commodity futures markets?**

Congress controls the means for funding the CFTC and over the course of the agency's history, it has maintained the agency's funding wholly through the appropriations process. There is a broad public interest in the central price discovery function of the futures markets that affect all Americans. However, the CFTC is the only financial regulatory body that is not partially funded through a fee. Given the CFTC's serious funding needs, I encourage Congress to consider all available options for funding the agency, including a user fee.

CME Group
A CME/Chicago Board of Trade/NYMEX Company

September 19, 2008

The Honorable Bart Stupak
Chairman
Subcommittee on Oversight and Investigations
U.S. House of Representatives
Washington, D.C. 20515-6115

Dear Chairman Stupak:

Thank you for the opportunity to appear before your subcommittee on June 23, 2008 at the hearing entitled "Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II." You have asked me to respond to questions for the hearing record. Attached are the responses.

Please let me know if I can be of further assistance.

Sincerely,

James E. Newsome

Dr. James E. Newsome
Director, CME Group

NYMEX World Headquarters World Financial Center One North End Avenue New York, NY 10282 cmegroup.com

1. You testified that the recently enacted Farm bill "effectively" addressed the "Enron Loophole." This loophole allowed traders to evade the New York Mercantile Exchange (NYMEX) market rules and shift positions to an unregulated market with identical contracts. Contracts which are "declared" "significant price discovery contracts" by the U.S. Commodity Futures Trading Commission (CFTC) will be subject to reporting and position limits under the recently enacted Farm bill. It is possible that only one contract, the natural gas- futures contract, will be covered under the regulations implementing the Farm bill. That could leave hundreds of other contracts outside of this definition.

    a. Given that the CFTC has yet to issue regulations, upon what basis do you conclude that the Farm bill amendments will be effective in fully closing the Enron loophole?

A. With the Farm Bill amendments, Congress focused upon trading in the largely unregulated trading facility category known as exempt commercial markets, and Congress made a judgment that it would concentrate on those contracts that triggered a broader public interest concern once they began serving in a price discovery role. Congress also determined to take a targeted approach by focusing on core market surveillance tools and oversight by the ECM. We respect the judgment of Congress. We believe that the Farm Bill amendments will address the public policy concerns identified where an unregulated trading platform offers a contract that is directly linked to a contract listed on a regulated exchange and effectively affects the price discovery function of the regulated market. Presently, only the natural gas contract traded on the Intercontinental Exchange meets the criteria to be subject to CFTC regulation. We believe that it is reasonable for Congress to consider whether there may be value, as the CFTC suggested in its recent report, in having greater transparency as to activity occurring in the more traditional OTC bilateral market.

2. You also testified that NYMEX Holdings is going to set up an exempt- commercial market (ECM) similar to the IntercontinentalExchange, Inc.s (ICE) electronic-trading platform in the U.S. This platform trades mainly natural gas and electricity- futures contracts.

    a. What is the expected schedule for setting up this NYMEX- operated ECM? When will it begin operations?

A. As a result of the acquisition by the CME Group, which closed on August 22, 2008, the CME is currently reviewing existing NYMEX Division business initiatives, including the possible establishment of an ECM. No date has been set yet for a decision on this project.

    b. Except for the natural -gas contract, are there any look- alike contracts traded on ICE which would be subject to position limits or large trader reporting if they were traded on NYMEX? Please identify these contracts.

A. **The ECM operated by ICE primarily focuses upon domestic natural gas and electricity contracts. There are certain contracts listed by ICE that may or may not qualify as "look-alikes" but that do appear to be close economic substitutes to contracts listed by NYMEX as a DCM. Such contracts include various nat gas swing and nat gas basis swaps. As NYMEX has not yet determined a definitive product slate for the possible launch of a NYMEX ECM, we cannot provide information regarding particular products that may end up being listed on such an ECM.**

c. From the perspective of a trader, is there a reason that trading on NYMEX is less desirable than trading on an ECM for contracts which are not significant price discovery contracts?

A. **There could be a variety of reasons why a trader might potentially prefer to trade essentially the same contract on an ECM (if it is not a significant price discovery contract) rather than on a regulated contract market such as NYMEX. Those reasons might include, among other things, less transparency and less regulation. For example, on an ECM, there is no requirement that large traders report their positions daily, nor are there any restrictions on the size of positions that a trader may carry.**

3. Your testimony argues in favor of position limits to control excessive speculation.

a. As a matter of policy, should traders be able to accumulate the maximum positions in multiple markets as a way to evade speculative- position limits imposed on any one individual market? If the answer is yes, please explain how this helps control excessive speculation?

A. **Traders should not be permitted to circumvent position limits under any circumstances. However, position limits are applied by individual exchanges to their own listed contracts. The CFTC has the ability to see positions carried on all CFTC-regulated markets and therefore, is in the best position to determine whether positions in like contracts carried across regulated markets presents any market-related problem. Vibrant liquid futures markets are critical to the U.S. economy and must be considered in any discussion concerning restricting market participation. Related to this point, we would distinguish a situation involving OTC positions in relatively standardized contracts that are close economic substitutes to futures contracts traded on a contract market regulated by the CFTC. As was the case with Amaranth, when a company that hits the speculative position limits or exceeds the accountability levels is asked to reduce its position, but instead shifts large positions to other unregulated trading platforms, the market surveillance safeguards of the regulated markets are effectively skirted. This must not be permitted.**

b. NYMEX's open interest for the West Texas Intermediate contract is three times the size of open interest on ICE Futures Europe. For purposes of the CFTC's "no action" letters, which set conditions for access to U.S. markets, should the NYMEX speculative-position limits for each contract be the same as ICE Futures Europe or should the ICE- Futures position limits be proportionally smaller to control for excessive speculation?

A. In our view, if the contract being listed on a non-U.S. market is based on the same underlying physical commodity or market and same delivery locations, then the limits generally should be the same or similar because exchange limits are primarily set based on the deliverable supply at the particular delivery location(s).

4. You testified about the "new fundamentals" of oil prices, which include a weak dollar and geopolitical concerns.

   a. Do you agree with the international Monetary Fund, which stated, "It appears that speculation has played a significant role in the run up in oil prices as the U.S. dollar has weakened and investors have looked for a hedge in oil futures and gold."

A. We do not agree with the IMF statement regarding the role of speculation. While it is common knowledge that the U.S. dollar did in fact weaken earlier in the year, noted economists have stated that the devalued dollar has contributed to the increased crude oil prices, along with the fundamentals of supply and demand. Furthermore, we are not aware of any demonstration by the IMF as to how speculators could have a significant role in oil prices by trading on futures markets over time – given that crude oil futures prices continue to be driven by the market fundamentals of the far larger physical cash market for crude oil, a market that may well be 10 times the size of our crude futures contract.

5. To support your argument that oil prices are not inflated above supply and demand, you hypothesized that oil companies would increase their short positions and lock in contracts to sell at today's price. Have you surveyed oil companies to draw this conclusion?

A. Oil companies, like other corporations, have a duty to their share-holders to maximize profits. If a trader at an oil company believed that prices did not reflect market fundamentals, they would view this imbalance as a trading opportunity. We have not surveyed oil companies, but we know that this is how markets work.

6. A number of oil producers lost money by selling futures contracts when the market prices were $40 dollars per barrel lower than the current value. Not only did they miss price appreciation, but also many were hit with large margin calls as the price rose. Is this real world phenomenon an explanation for why there are fewer sellers in the commercial category?

A. We are not in a position to comment as to whether oil producers lost or made money earlier on crude oil futures contracts earlier this year. If an oil producer had established a position in a crude oil futures contract that was hedging exposure in the underlying physical commodity, assuming that the physical position was adequately hedged by the futures position, then a loss in the futures position should be offset by gains in the physical position. On the other hand, we are aware that higher margin levels, while perhaps not significantly affecting trading decisions by major commercial firms, could have an impact on decisions by smaller commercials regarding the extent of their participation in our markets. That stated, we are not entirely clear regarding the question of the number of sellers in the commercial category. We interpret this question to instead to be inquiring about changes in total open interest on the short side in the CFTC's Commitment of Traders reports. These categories will fluctuate over time as market fundamentals change, and we are not prepared to opine as to specific reasons as to why any category is at a certain level or as to why changes occur at any one point in time.

7. How do you define "excessive speculation"? Is this something which requires willful conduct amongst participants to manipulate prices or can this arise inadvertently through the actions of multiple participants all following the same investment pattern?

A. Congress has always declined to provide an express statutory definition for excessive speculation, perhaps because it realizes that this can often be a fairly fact-specific inquiry. That stated, the CME places a very strong and vigorous emphasis on maintaining orderly markets of high integrity and our focus thus goes well beyond the traditional regulatory concern with manipulation. It is important to distinguish between excessive speculation and attempted and actual market manipulation. Manipulation generally involves an intentional effort to affect a market price and both the CFTC and the regulated exchanges have very active surveillance and enforcement programs that strictly police and discipline this illegal conduct.

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RESPONSE TO CONGRESSMAN BART STUPAK

1. **Question:** On June 17, 2008 the U.S. Commodity Futures Trading Commission (CFTC) added new conditions to its "no-action" letter with Intercontinental Exchange, Inc. (ICE) which requires public reporting of large-trader positions, and imposition of position limits and accountability levels comparable to the New York Mercantile Exchange (NYMEX) for the energy contracts that match up with those traded in the U.S. Has the Financial Services Authority (FSA) put this rule change out for the market consultation? Will traders object?

Answer: ICE Futures Europe (the "Exchange") has been working diligently to ensure that the rules required by the CFTC meet the FSA's requirements. Following receipt of the amended no-action letter, ICE Futures Europe has drawn up rules to facilitate putting the terms of the no-action letter into effect. The rules give the Exchange the power to impose position limits and position accountability levels in respect of contracts with a link to contracts on a US Designated Contract Market. In accordance with the terms of the Financial Services and Markets Act 2000 ("FSMA"), the Exchange has notified the UK Financial Services Authority ("FSA") of the proposed rule changes. The Exchange also published the proposed rule changes by Circular for consultation. The FSA is presently considering whether to call in the rule change for formal review in accordance with the terms of the Act. Some traders have raised concerns about the rule changes, but as of the date of this letter, no formal objections have been lodged with the Exchange.

2. **Question:** If legislation were enacted to require ICE Futures to list its energy contracts with a U.S. delivery point on a designated contract market, could you comply or would you suspend trading of the contract altogether and cede that market share to other competitors who would be willing to comply?

Answer: We are unsure of the premise of your question as it suggests that legislation could be passed in the United States that would require ICE Futures Europe, a Recognised Investment Exchange organized and operated in the United Kingdom, to redomicile itself in the United States as a U.S. designated contract market. We interpret your question as suggesting legislation that would prohibit direct screen based access to trading on ICE Futures Europe's markets by U.S. entities. To be clear, ICE Futures Europe would not discontinue trading of the contract as there is customer demand for the contract and we believe that it is an important contract offering of ICE Futures Europe's customers.

Pursuant to the Commodity Futures Trading Commission's no action letter, the Exchange will be placing speculative limits and will be meeting the same reporting requirements as U.S. based exchanges on its contracts that settle on the price of a contract traded by a U.S. designated contract market. This is in addition to the stringent oversight provided by the FSA. There would be little regulatory benefit to moving these contracts to the United States, while the Exchange would have many business, operational and legal hurdles in moving the contracts. The Exchange has a large European customer base that trades the spread between the Brent crude oil contract and the WTI contract. This business is important to the Exchange and thus it is doubtful that the Exchange would delist the contract for trading. It is important to note that the mutual recognition regime embodied in the current "no-action" letters permitting foreign boards of trade screen based trading in the United States (as well permitting domestic exchanges direct screen based trading access in the United Kingdom and other countries) forms the basis upon which the CFTC and the FSA exchange market information that allows each to properly oversee markets for global commodities such as crude oil; it is likely that a revocation of screen based access would not result is a cessation of trading in contracts with U.S. delivery points, but would likely remove the basis for the regulatory information sharing agreements that presently exist between the CFTC and the FSA.

3. **Question**: Since as much as 64 percent of all traders for the WTI futures contract ICE Futures Europe originate in the U.S, would it be feasible for ICE to list the WTI contract, the Heating Oil contract, and the RBOB gasoline contract on ICE Futures U.S.?

Answer: No, it would not be feasible to list these contracts on ICE Futures U.S. For the quarter ended 30 September 2008, some 45.5% of contract volume in the Exchange's ICE WTI Futures Contract originated in the U.S. As a global exchange, market participants from all over the world have access to the Exchange's markets, just as international participants have access to U.S. markets such as the Chicago Mercantile Exchange and other international markets such as LIFFE and Eurex. The Exchange's WTI futures contract is particularly attractive to participants in Europe and Asia who wish to trade it alongside the other contracts listed by the Exchange, including its Brent Crude Futures and Gas Oil Futures contracts. All of ICE's regulated oil futures business is traded on ICE Futures Europe and will be cleared by ICE Clear Europe, a London-based UK Recognised Clearing House. In addition, these contracts are, unlike there NYMEX counterparts, designed to be governed by UK law, which is important to many of the Exchange's market participants given familiarity with U.K. insolvency laws.

In addition, ICE Futures U.S. (formerly the Board of Trade of the City of New York) principally trades soft commodities (coffee, cocoa, sugar, cotton and frozen concentrated orange juice) and financial products. As Europe's leading energy exchange, the staff at ICE Futures Europe specialize in energy markets and the appropriate market surveillance and supervision staff are based in London rather than in New York.

4. **Question:** You testified that FSA has two individuals dedicated to market monitoring of the ICE Futures Europe exchange. How many CFTC staff oversee ICE Futures U.S.?

Answer: It should be pointed out that, as in the United States and other countries, the Exchange is itself a self regulatory organization with regulatory responsibilities and the Exchange serves as the front line regulator. Thus, day to day monitoring is done by the Exchange. As to the staffing of the CFTC, this question is better directed to the CFTC.

5. **Question:** Please quantify the amount of open interest for WTI on ICE Futures Europe that is attributable to commercial traders, noncommercial traders, and swap dealers?

Answer: Under U.S. regulation, the CFTC issues a Commitment of Traders report, which is the basis pursuant to which trading parties categorize their trading. The CFTC issues the Commitment of Traders report and is charged with ensuring that traders correctly categorize the nature of their trading. It is our understanding that the two categories that the CFTC has historically used have been commercial and noncommercial traders, and until the recent "special call" issued to investment banks and swaps dealers, the CFTC did not attempt to categorize or separately track the amount of trading attributable to swaps dealers.

There is no equivalent to the Commitment of Traders report that is issued by the FSA, so there has not historically been a basis upon which traders were required to categorize their trading activity as "commercial" or "non-commercial". The Exchange is currently collecting the data for the CFTC to create Commitments of Traders reports for the ICE WTI contract and for any other contract that settles on the price of a U.S. designated contract market. Until the CFTC issues its commitment of traders report for the ICE WTI contract, any data provided by the Exchange would be premature.

6. **Question:** What percentage of the open interest for the WTI contract is attributable to commodity-index investments?

Answer: The Exchange does not presently collect this data, and it is our understanding that neither the CFTC nor designated contract markets have historically tracked this data. It is anticipated that the CFTC will start breaking out data listing commodity index investments pursuant to recommendations related to its recent report on index investing in commodity markets, and ICE Futures Europe would expect to have traders in its markets comply with such requirements in connection future reporting.

7. **Question**: What percentage of open interest for the Brent-crude contract is attributable to commodity-index investments?

Answer: The Exchange does not presently collect this data.

8. **Question:** Is there arbitrage between the WTI-futures contract and the cash market? What percentage of the transactions volume is attributable to arbitrage between WTI and the cash market?

Answer: While a benchmark price for crude oil, there is only a very small cash market for WTI, reflecting the low level of WTI production. In fact reflecting the low level of WTI production, many types of crude oil (i.e. Colombian Cushana or Nigerian Iboe) can be delivered for the physically settled NYMEX WTI contract. Thus, the percentage of transaction volume attributable to arbitrage between WTI futures and the WTI cash market is estimated to be very small, but we do not have exact data to respond to this question.

9. **Question**: Does the WTI-futures contract traded on ICE Futures Europe affect price discovery?

Answer: Trading of the Exchange's WTI Futures Contract is fully transparent, with all bids, offers, trades and prices published on a real-time basis. The contract therefore contributes towards price discovery in the global oil markets.

10. **Question**: Your web site has prominently posted a quote from a recent Wall Street Journal editorial stating,

> "The first refuge of a politician panicked by rising prices is always to blame 'speculators.' So right on time for this election season, Congress has decided to do something about rising oil prices by shooting the messenger known as the energy futures market." (June 10, 2008)

Does that editorial reflect the view of ICE with respect to the oversight activities carried out by this Subcommittee?

Answer: No. ICE has sought to be very cooperative with the Subcommittee's efforts, including making Sir Bob Reid, Chairman of ICE Futures Europe and a citizen of the United Kingdom, available for questioning by the Subcommittee. ICE staff has met with the staff of the Subcommittee numerous times to provide information on ICE's markets and has been responsive to the Subcommittee's data requests, including facilitating direct telephone interviews with the ICE Futures Europe Director of Regulation.

The statement noted above is quoted from one of many articles cited on the website in question. ICE felt it was necessary to start the website in order to counter the many factual misstatements and inaccuracies that had been made in the press and in testimony before Congress about commodities trading in general and about ICE Futures Europe's operations in particular. In particular, the misstatements made by Professor Michael Greenberger before Congress and in the press warranted a public response in order to ensure that the public, including ICE's stockholders, as well as lawmakers had access to accurate information about ICE and ICE Futures Europe. These misstatements included basic factual matters regarding ICE Futures Europe's business, its location, its regulatory status, its jurisdiction of organization and operation, and its history of cooperation with the FSA and the CFTC. Examples of such statements can be found in the attached Joint Analysis Prepared by Majority and Minority Staffs of the Senate Permanent Subcommittee on Investigations of Michael Greenberger Testimony Before Senate Committee on Commerce, Science and Transportation on June 3, 2008, (the "Senate Permanent Subcommittee Joint Analysis"). Professor Greenberger's statements cited as incorrect by the bipartisian report include (1) "Overnight, [prohibiting the trading of energy commodities in Exempt Commercial Markets] will bring down the price of crude oil, I believe, by 25 percent"; (2) "because of that Enron loophole, which I believe has not been closed for crude oil, there are no speculation limits in these markets that are unregulated" and (3) by CFTC pronouncement, crude oil, gasoline and heating oil futures will not be covered by the new legislation [the recently enacted Farm Bill]" We respectfully request that attached Senate Permanent Subcommittee Joint Analysis be made part of the Subcommittee's record, and request that the inconsistencies found in Professor Greenberger's testimony be reconciled in any Report issued by the Subcommittee and that the same also be considered by the Subcommittee in determining whether it is appropriate for the Subcommittee to rely on other portions of Professor Greenberger's testimony.

In conclusion, we appreciate the work of the Subcommittee on Oversight and Investigations, and stand willing to assist the Subcommittee in any way we can in continuing to study these important issues.

United States Senate
PERMANENT SUBCOMMITTEE ON INVESTIGATIONS
Committee on Homeland Security and Governmental Affairs
Carl Levin, Chairman
Norm Coleman, Ranking Minority Member

JOINT ANALYSIS PREPARED BY MAJORITY AND MINORITY STAFFS OF THE SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS OF MICHAEL GREENBERGER TESTIMONY BEFORE SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION ON JUNE 3, 2008

June 24, 2008

Because many questions have been directed to the Senate Permanent Subcommittee on Investigations (PSI) about the written and oral testimony of Michael Greenberger before the Senate Committee on Commerce, Science and Transportation on June 3, 2008, we have prepared this analysis of the major issues he raised involving: (1) the recently enacted law to close the "Enron loophole," and (2) recent legislative proposals and administrative actions taken to strengthen U.S. oversight of futures contracts traded from within the United States on a foreign exchange.

The identified statements are excerpted from Mr. Greenberger's oral testimony or, where a page number is provided, from his prepared statement.

ISSUES RELATED TO CLOSING THE ENRON LOOPHOLE

1. STATEMENT: *"[The legislation to close the Enron loophole]... is the biggest joke in the world because it was written by the exchange that needs to be regulated."*

STATEMENT (p.3): *"Virtually all parties now agree the Enron loophole must be repealed."*

RESPONSE: The legislation to close the Enron loophole was written by the United States Congress, not the Intercontinental Exchange. Closing the Enron loophole has been the subject of repeated bills introduced on this subject since 2002. In the fall of 2007, following a PSI report and hearings on excessive speculation and the resulting move in Congress towards legislative reforms, the Commodity Futures Trading Commission (CFTC) and the President's Working Group (consisting of the Departments of Treasury, the Federal Reserve, the Securities and Exchange Commission, and the CFTC) submitted to Congress draft legislation to close the Enron loophole. That draft underwent significant revision during the legislative process, including numerous significant changes proposed by Senators Levin, Feinstein, Snowe, Coleman and others. The final language was the product of extensive bipartisan negotiations in both Houses of Congress and a conference committee led by the House and Senate Agriculture Committees. Throughout the legislative process ICE expressed numerous disagreements with many of the provisions in the various drafts of this legislation. The final legislation did not include many of the provisions that ICE had sought.

The compromise legislation finally enacted into law as part of the Farm Bill enjoyed strong bipartisan support from Members in both Houses and from many energy, agricultural, consumer, and industrial organizations.[1] We are unaware of any consensus to alter this legislation, which represents a bipartisan achievement after years of work.

2. STATEMENT: *"The End the Enron Loophole, because it was written by the Intercontinental Exchange, handed to the CFTC and then handed to Congress, does not deal with crude oil."*

STATEMENT (p.4): *"Thus, by CFTC pronouncement, crude oil, gasoline and heating oil futures will not be covered by the new legislation."*

RESPONSE: These statements are incorrect or may leave an incorrect impression. The law enacted by Congress to close the Enron loophole regulates the electronic trading of all types of energy and metal commodities on Exempt Commercial Markets without exception, including crude oil, gasoline, and heating oil, if the relevant contracts perform a significant price discovery function. The CFTC has not made any statements or decisions to exempt any class of commodities or energy contracts from CFTC oversight under the new law. At the same time, as a practical matter, the new law will not affect current trading of U.S. crude oil, gasoline, and heating oil futures contracts -- not because of who drafted the law or because of any gaps in the legislation -- but because futures contracts in those commodities are not currently being traded on U.S. Exempt Commercial Markets. Rather, futures contracts in these commodities are being traded on futures exchanges in the United States and United Kingdom. Should any of those energy commodities ever be traded on Exempt Commercial Markets, the new law makes it clear that the CFTC will be able to exercise oversight over them. As a result of the legislation to close the Enron loophole, traders will no longer have the opportunity to trade crude oil, gasoline, or home heating oil on U.S. electronic markets without CFTC oversight.

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[1] This legislation was supported by the American Public Gas Association, American Public Power Association, Consumer Federation of America, Environmental Defense, Industrial Energy Consumers of America, Independent Oil Marketers Association of New England, Mid-Atlantic Petroleum Distributor's Association, National Association of Convenience Stores, National Association of Truck Stop Operators, National Association of Wheat Growers, National Barley Growers Association, National Farmers Union, National Grange, National Rural Electrical Cooperative Association, New England Fuel Institute, Pacific Northwest Oilheat Council, Petroleum Marketers Association of America, Petroleum Transportation and Storage Association, Public Citizen, Society of Independent Gasoline Marketers of America, Steel Manufacturers Association, and Western Petroleum Marketers Association.

3. **STATEMENT (p.4):** *". . . the Farm Bill amendment requires the CFTC and the public to prove on a case-by-case basis through lengthy administrative proceedings that an individual energy contract should be regulated if the CFTC can prove that contract 'serve[s] a significant price discovery function" in order to detect and prevent manipulation."*

STATEMENT: *"[The legislation to close the Enron loophole] puts 1,000 burdens on the CFTC and the public to prove that there needs to be regulation."*

STATEMENT: *"[The CFTC] has to go through complicated administrative hearings, which I can tell you will be challenged vigorously by people who can afford to make those challenges, and will have to prove by substantial evidence that that contract will be regulated."*

STATEMENT (p.4): *"It will doubtless be followed by lengthy and costly judicial challenges during which the CFTC and energy consuming public will be required to show that its difficult burden has not been met."*

RESPONSE: These statements are incorrect. The new law does not place any burden on the public, does not require extensive administrative proceedings to determine that a contract performs a significant price discovery function and is subject to CFTC oversight, and does not authorize judicial challenges to CFTC decisions in this area. To the contrary, the law explicitly gives the CFTC the "discretion" to determine which contracts perform significant price discovery functions and are subject to CFTC oversight. The statute and legislative history make it clear that formal administrative proceedings are not required and judicial challenges are not permitted. For example, during the Senate's consideration of the legislation, Senator Levin explained:

> The legislation also states clearly that a CFTC determination that a contract performs a significant price discovery function is a determination that is within the Commission's discretion; this determination is not intended to be subject to formal challenge through administrative proceedings."
>
> The Statement of Managers in the Conference Report states:
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> "The Managers do not intend that the Commission conduct an exhaustive annual examination of every contract traded on an electronic trading facility pursuant to the section 2(h)(3) exemption, but instead to concentrate on those contracts that are most likely to meet the criteria for performing a significant price discovery function.

The law directs the CFTC to determine which contracts are performing significant price discovery functions within 180 days of promulgating regulations setting forth the criteria to be considered when evaluating individual contracts.

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4. STATEMENT: *"The CFTC has said that farm bill amendment [sic] will affect one out of thousands of energy contracts."*

STATEMENT (p.4): *This contract-by-contract process will take months, if not years, to complete and it will then only apply to a single contract."*

RESPONSE: These statements are incorrect. The CFTC has not made any statements or provided any indication of the number of commodities or contracts that will likely be determined to perform a significant price discovery function. The CFTC certainly has not indicated that only one contract will be covered. To the contrary, informed observers indicate multiple contracts are likely to qualify for CFTC oversight.

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5. STATEMENT (p.4): *"Moreover, the Farm Bill's attempt to end the Enron Loophole will doubtless lead to further regulatory arbitrage. If the CFTC should be able to prove that an individual energy futures contract has contract has [sic] a 'significant price discovery function,' and thus should be subject to regulation, traders will almost certainly simply move their trading to equivalent contracts that remain exempt from regulation."*

RESPONSE: Mr. Greenberger appears to be predicting that if the CFTC determines that one particular contract performs a significant price discovery function, then traders will begin trading a different contract that hasn't been deemed to perform a significant price discovery function and isn't subject to CFTC oversight. Practical obstacles and the design of the new law, however, make this type of maneuvering unlikely.

First, it is much more difficult for a trader to use a contract that does not perform a price discovery function since, by definition, it will have a lower trading volume and fewer counterparties. During the PSI Amaranth investigation, numerous traders told the Subcommittee that the most significant factors in determining which market and contract to use for trading were price and liquidity. All of the traders interviewed by the Subcommittee stated that they would trade the contract that provided the best price and most liquidity, regardless of whether it was in a regulated or unregulated market. Secondly, if a significant amount of trading did migrate from a regulated contract to an unregulated contract simply to avoid regulation, the CFTC could readily determine that the second contract also performed a significant price discovery function and regain its ability to exercise oversight. In fact, one of the statutory factors for determining whether a contract performs a significant price discovery function is whether that contract is being used for arbitraging purposes. The new law thus contains provisions designed to prevent exactly the type of arbitrage scenario Mr. Greenberger describes.

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6. STATEMENT: *"I would go back to the status quo ante before the Enron loophole was passed."*

STATEMENT (p.5): *"Again, the easiest course to end the Enron loophole was not chosen as part of the Farm Bill. The most effective closure would have simply returned the Commodity Exchange Act to the status quo ante prior to the passage of the Enron loophole."*

STATEMENT (p.3): *"The simplest way to repeal [the Enron loophole] would be to add two words to the Act's definition of 'exempt commodity' so it reads: an exempt commodity does 'not include an agriculture or energy commodity;' and two words to 7 U.S.C. § 7(e) to make clear that 'agricultural and energy commodities must trade on regulated markets."*

RESPONSE: Mr. Greenberger seems to be proposing a return to the legal framework for commodity trading prior to enactment of the Commodity Futures Modernization Act (CFMA) of 2000, and to require energy and metal commodities to be traded in the same way as agricultural commodities, which means they could not be traded on electronic exchanges other than a futures exchange. This approach would prohibit energy traders from trading financially settled swap instruments on electronic exchanges that are not futures exchanges, even though under the legislation the trading of significant price discovery contracts on these electronic exchanges will be regulated just like futures contracts. At the same time, the proposal would continue to permit those traders to trade these swap instruments amongst themselves by unregulated non-electronic means, such as through voice brokers, large financial institutions that operate as swap "dealers," and directly between each other using telephones and fax machines.

One of the problems with this approach is that it would re-direct trading from electronic exchanges that promote price transparency and cleared trades, two mechanisms that increase market efficiency and stability, toward greater use of unregulated, non-transparent, and non-cleared trading of swaps that impair price transparency, increase systemic risk, and make it harder to detect and prevent manipulation. It is partly because financially settled swaps do not require the physical delivery of a commodity, and partly because of the historic inability of the futures exchanges to develop active markets for more specialized types of financial and energy swaps, that Congress has never required them to be traded on fully regulated futures exchanges. To do so now would constitute a major change in U.S. commodity law, and would go much further than the status quo ante prior to the CFMA. In addition, eliminating electronic exchanges open to large traders would dismantle an accepted commodity market mechanism – the significant portions of which are now regulated -- for little apparent regulatory gain.

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7. STATEMENT: *"Prior to the [Enron loophole], every futures contract – oil, collateralized debt obligations, credit default swaps -- had to be traded pursuant to regulation that had age-old and time-tested controls on speculation."*

RESPONSE: This statement is incorrect. Prior to the Commodity Futures Modernization Act (CFMA), large traders trading financial instruments like collateralized debt obligations, credit default swaps, and energy swaps were eligible for the hybrid and swaps exemption from the requirement that all futures contracts be traded on a regulated futures exchange. See, e.g., 17

C.F.R. Part 35 (Exemption of Swap Agreements). Persons trading swaps under the various pre-CFMA swaps exemptions were not subject to speculative position limits.

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8. STATEMENT: *"Overnight, [prohibiting the trading of energy commodities in Exempt Commercial Markets] will bring down the price of crude oil, I believe, by 25 percent."*

RESPONSE: According to recent market data, there is little to no trading of crude oil contracts on exempt commercial markets in the United States. Prohibiting the trading of energy commodities in a market in which no trading is currently taking place is, thus, unlikely to have an effect on the price of crude oil. Moreover, although there have never been any Exempt Commercial Markets for agricultural commodities, many agricultural commodities have recently experienced substantial price spikes. There is no credible evidence that simply amending the CEA to regulate energy commodities as if they were agricultural commodities will lead to lower energy prices.

ISSUES RELATED TO CLOSING THE LONDON LOOPHOLE

9. STATEMENT: *"[B]ecause of that Enron loophole, which I believe has not been closed for crude oil, there are no speculation limits in these markets that are unregulated."*

RESPONSE: The Enron loophole has been closed for all energy and metal commodities, including crude oil traded on Exempt Commercial Markets in the United States. But currently, crude oil is not being traded on those markets.

Crude oil is instead being traded on the NYMEX exchange in New York, which has speculative position limits, and on the ICE Futures Europe exchange in London, which does not. The ICE Futures Europe exchange in London has no speculative position limits, because until recently neither the British Financial Services Authority (FSA) nor ICE Futures Europe had imposed them for U.S. crude oil contracts traded on that exchange.

Since 1982, Section 4 of the Commodity Exchange Act has authorized U.S. persons to trade on foreign exchanges and has prohibited the CFTC from imposing regulatory requirements upon those foreign exchanges. Recently, this CEA exemption has been referred to as the London loophole, since it allows U.S. traders to trade on the ICE exchange in London without CFTC oversight and without speculative position limits. On June 16, 2008, in response to concerns expressed about the London loophole, the CFTC announced that ICE Futures Europe would have to implement speculative position limits in order to be able to continue to offer U.S. traders the option of trading its U.S. crude oil contract through U.S.-based trading terminals. The CFTC is also working with the FSA on an agreement to impose speculative position limits on this contract and to alert the CFTC when any trader has exceeded those limits.

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10. STATEMENT: *"There is now nothing in the law that sanctions foreign board of trades in the United States trading U.S. products being able to escape regulation. . . . What is now in my belief, illegal, and will soon, if somebody wakes up, be invalidated by either a private individual being hurt by it or a state attorney general."*

STATEMENT (p.5): *"These staff no action letters have been referred to as Foreign Board of Trade exemptions (FBOTs) – a term which as of today is nowhere found in the CEA.*

STATEMENT (p.12): *"[T]here is no statute to date that provides any exemption for U.S. trading on Foreign Boards of Trade. The Commodity Exchange Act says nothing about Foreign Boards of Trade."*

RESPONSE: These statements are incorrect. The Commodity Exchange Act (CEA) explicitly excludes trading on a foreign board of trade from key CFTC regulations. Section 4(a) of the CEA explicitly exempts from the requirement that all futures contracts be traded on a CFTC-regulated futures exchange contracts traded on or subject to the rules of any board of trade or exchange "located outside the United States." Section 4(b) prohibits the CFTC from issuing any regulation that approves or "governs in any way any rule or contract, rule, regulation, or action of any foreign board of trade."

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11. STATEMENT (p.5): *"It has been a fundamental tenet, recognized by exchanges all over the world, that if the trading of futures contracts takes place within the United States, that trading, unless otherwise exempted or excluded by the Act itself or by the CFTC through an exemption granted pursuant to the Futures Trading Practices Act of 1992 (otherwise referred to as section 4(c)) ,is subject to the regulatory jurisdiction of the Commodity Futures Trading Commission. Recognition of that sweeping reach of U.S. jurisdiction is evidenced by the fact that most major foreign futures exchanges have asked the CFTC for an exemption from the full regulatory requirements of the Commodity Exchange Act (CEA) to which they might otherwise be subject in order to allow those foreign entities to conduct trading in the U.S. on U.S. based terminals of foreign delivered futures contracts. That exemption, premised on section 4(c), has been issued to many foreign exchanges through staff no action letters, which permit trading on a foreign exchange's U.S.-based terminals without that exchange being subject to U.S. statutory or regulatory requirements."*

RESPONSE: These statements mischaracterize the statutory and legal basis for the CFTC's determination to permit foreign exchanges to operate trading terminals in the United States without being subject to full CFTC regulation as a futures exchange. The basis for the CFTC's determination to grant a foreign board of trade or exchange permission to operate trading terminals in the U.S. without being subject to the full regulatory requirements applicable to U.S. futures exchanges is not Section 4(c) of the CEA or Futures Trading Practices Act, but rather CEA Section 4(a). Section 4(a) provides that all futures contracts traded in the United States must be traded on a regulated exchange other than contracts traded on or subject to the rules of a board of trade or exchange located outside the United States. 7 U.S.C. § 6(a). Futures contracts traded from within the United States on a foreign exchange are, thus, excluded by statute from the requirement that futures contracts traded in the United States be traded on a futures exchange regulated by the CFTC.

12. STATEMENT (p.6): *"This exemption was entirely the creation of CFTC staff and it has never been formally approved by the Commission itself."*

RESPONSE: This statement is incorrect. The decision to allow foreign exchanges to establish trading terminals in the United States and to permit trading on those terminals outside of CFTC oversight was formally approved by the CFTC in a Policy Statement issued on November 2, 2006. The 2006 Policy Statement was issued after a process in which the CFTC sought public comment, received written comment letters, and held a public hearing on the issues raised. In the Policy Statement, the CFTC wrote:

> "The Commodity Futures Trading Commission is issuing a Statement of Policy that affirms the use of the no-action process to permit foreign boards of trade to provide direct access to their electronic trading systems to U.S. members or authorized participants, and provides additional guidance and procedural enhancements."[2]

13. STATEMENT (p.6): *"The staff FBOT no action letter process never contemplated that an exchange owned by or affiliated with a U.S. entity would escape the CFTC regulation imposed on traditional U.S. exchanges."*

RESPONSE: This statement is incorrect. In its 2006 Policy Statement, the CFTC determined it would not be appropriate to use any "bright-line" test based on the location of an affiliate or related corporate entity to determine whether to treat an entity as a U.S. or foreign exchange. Instead, the CFTC adopted a flexible approach that considered the totality of circumstances for determining whether an exchange was foreign or domestic, including whether the exchange was affiliated with a U.S. exchange. This approach was favored by most of the comments received by the Commission on this issue.

14. STATEMENT (p.3): *"For purposes of facilitating exempt natural gas futures, ICE is deemed a U.S. 'exempt commercial market' under the Enron loophole. For purposes of its facilitating U.S. WTI crude oil futures, the CFTC, by informal staff action, deems ICE to be a U.K. entity not subject to direct CFTC regulation even though ICE maintains U.S. headquarters and trading infrastructure, facilitating, inter alia, @ 30% of trades in U.S. WTI futures."*

RESPONSE: The statement gives the inaccurate impression that a single legal entity named "ICE" operates two exchanges, one in the United States and one in London, and is being treated differently depending upon which exchange is at issue. In fact, the legal entities that operate these two exchanges are different.

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[2] Commodity Futures Trading Commission, Policy Statement, *Boards of Trade Located Outside of the United States and No-Action Relief From the Requirement To Become a Designated Contract Market or Derivatives Transaction Execution Facility*, 71 Fed. Reg. 64443 (Nov. 2, 2006).

The legal entity that operates the electronic exchange within the United States is the Intercontinental Exchange ("ICE"). ICE is a Delaware corporation located in Atlanta, Georgia. ICE pays U.S. taxes, uses U.S. employees, and operates an exempt commercial market in the United States that, among other commodities, trades natural gas contracts.

ICE has several wholly-owned subsidiaries that operate regulated futures exchanges — ICE Futures US, ICE Futures Canada, and ICE Futures Europe. Each subsidiary has its own management and an independent board of directors. Each exchange is overseen by the regulatory authority of the country in which the exchange is physically located. The regulatory authority oversees the exchange and the subsidiary that operates the exchange, but not the parent corporation, ICE.

ICE Futures Europe operates an exchange in London and, on it, trades European crude oil (Brent crude oil from the North Sea), European heating oil, European natural gas, and other European contracts as well as a financially-settled U.S. crude oil futures contract (based on the price of West Texas Intermediate crude oil contracts traded in New York), U.S. gasoline, and U.S. home heating oil contracts. ICE Futures Europe is registered in the United Kingdom, pays U.K. taxes, has U.K. employees, is treated as a U.K. corporation, and is regulated by the U.K. Financial Services Authority.

The CFTC has not deemed the parent corporation ICE to be a U.K. entity; it treats ICE as a U.S. corporation, which it is. ICE Futures Europe, on the other hand, is a U.K. corporation, not because the CFTC has "deemed it to be" a U.K. entity, but by operation of U.K. law. Moreover, under U.K. law, the parent corporation, ICE, is not permitted to direct the activities of its subsidiary, ICE Futures Europe, in operating the London exchange. The CFTC thus treats ICE Futures Europe as a foreign board of trade, because ICE Futures Europe is, in fact, a foreign board of trade.

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15. STATEMENT (p.3): *"[T]he statute should also be amended to forbid an exchange from being deemed an unregulated foreign entity if its trading affiliate or trading infrastructure is in the U.S.; or if it trades a U.S. delivered contract within the U.S. that significantly affects price discovery."*

RESPONSE: The 2006 Policy Statement issued by the CFTC discusses the various criteria for determining when a foreign board of trade should be permitted to operate within the United States and not be subject to full CFTC regulation as a domestic futures exchange. The CFTC invited and considered public comments on all of the criteria urged by Mr. Greenberger. The Policy Statement states that the Commission "decided not to adopt any objective standards establishing a threshold test of U.S. location. Commission staff will continue to assess the legitimacy of any particular applicant to seek relief as a 'foreign' board of trade by considering the totality of factors presented by an applicant. This flexible case-by-case approach will permit staff, during a period of evolving market structure, to consider the unique combination of factual indicators of U.S. presence that may be presented by an applicant for relief."

16. STATEMENT (p.5): *"[T]he Dubai Mercantile Exchange, in affiliation with NYMEX, a U.S. exchange, has also commenced trading the U.S. delivered WTI contract on U.S. terminals, but is, by virtue of a CFTC no action letter, regulated by the Dubai Financial Service Authority."*

RESPONSE: This statement is incorrect. The Dubai Mercantile Exchange (DME) has not commenced trading crude oil contracts in the United States, although it has announced its intention to seek permission to establish DME trading terminals in the United States to trade this contract. Second, the DME is not considering trading a "U.S. delivered WTI contract," but rather a financially settled derivative contract whose price would be linked to the settlement price of the WTI contract traded on the NYMEX. The Dubai WTI–related contract would not require the physical delivery of any crude oil. Third, the trading of contracts on the DME will be regulated by the Dubai Financial Services Authority, not by virtue of any action or inaction by the CFTC, but rather by the operation of the law of Dubai, the jurisdiction in which the DME is located.

The issue is not whether the DME will regulate trading on an exchange located in its country, but whether the CFTC will be able to exercise oversight of DME contracts traded here in the United States. The CFTC has yet to grant DME permission to use trading terminals in the United States for the trading of its WTI contract and, prior to doing so, may follow the precedent set in the United Kingdom and require DME to provide daily trading data and apply speculative position limits to those contracts comparable to the reporting and trading requirements applicable to WTI-related contracts currently traded in the United States. Legislation has been introduced in the Senate, S. 2995 and S. 3129, that would require the CFTC to follow that course of action for every foreign exchange seeking to trade within the United States.

17. STATEMENT (p.12): *"S. 2995 . . . opens the door to any foreign exchange operating under an FBOT exemption escaping U.S. regulation for any U.S. delivered commodity . . . ."*

RESPONSE: This statement is incorrect. S. 2995 was introduced by Senators Levin and Feinstein in May. In June, a new provision was added to the bill and it was reintroduced as S. 3129, the Close the London Loophole Act sponsored by Senators Levin, Feinstein, Durbin, Dorgan, and Bingaman. There is nothing in either S. 2995 or S. 3129 that would "open the door" to any foreign board of trade "escaping U.S. regulation." To the contrary, both bills would make it *more* difficult for the CFTC to grant a no-action letter to a foreign exchange than under current CFTC practice. Both bills would require the CFTC, before granting or continuing permission for a foreign exchange to operate trading terminals within the United States, to make a specific finding that the foreign exchange has comparable transparency requirements and speculative positions limits to those in the United States. S. 3129 goes further and gives the CFTC explicit authority to: (1) prosecute U.S. persons who manipulate or attempt to manipulate the price of a commodity in interstate commerce through trading on a foreign exchange; (2) direct U.S. traders to reduce their positions on a foreign exchange when those positions exceed the applicable position limits or accountability levels; and (3) impose recordkeeping requirements on U.S. traders trading on a foreign board of trade or exchange. Both bills would strengthen U.S. oversight of foreign exchanges operating trading terminals in the United States.

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18. STATEMENT (p.13): *"S. 2995 does not incorporate all of the conditions within the present FBOT no action letter typically issued by CFTC staff."*

RESPONSE: S. 2995 and its successor bill S. 3129 do not limit the conditions that the CFTC may impose upon a foreign exchange in a no-action letter; both bills simply require that certain conditions be met before a foreign exchange is allowed to operate trading terminals within the United States. Nothing in either bill would restrict the conditions the CFTC may impose upon a foreign exchange to those specified in the bill language.

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19 STATEMENT (p.8): *"The Senate Permanent Investigating Subcommittee has now issued two reports, one in June 2006 and one in June 2007, that make a very strong (if not irrefutable case) that trading on ICE has been used to manipulate or excessively speculate in U.S. delivered crude oil and natural gas contracts. The June 2006 report cited economists who then concluded that when a barrel of crude was @ $77 in June 2006, $20 to $30 dollars of that cost was due to excessive speculation and/or manipulation on unregulated exchanges."*

RESPONSE: The 2006 and 2007 PSI reports focused on the role of excessive speculation in U.S. commodity markets; neither report contained any findings on whether traders manipulated crude oil or natural gas prices.

Post-Hearing Questions for the Record
Submitted to Professor Michael Greenberger
From Richard Miller

"Energy Speculation: Is Greater Regulation Nccessary to Stop Price Manipulation?-Part II"

June 23, 2008

1) Swap dealers have accumulated futures positions far in excess of the speculative position limits which are intended to prevent excessive speculation.

A) Why did the CFTC start to allow hedging exemptions for swap dealers who have commodity index investments?

In 1991, the CFTC by staff action in a letter established the precedent for granting swaps dealers a hedging exemption to allow them to hedge the exposure on the swaps contracts they were writing. This precedent accordingly allowed swaps dealers to escape speculation limits. I was not at the CFTC until September 1997. I have no direct knowledge of the thinking behind the issuance of the 1991 exemption or later similar staff exemptions. The effect of these exemptions was, however, to undermine completely in a highly opaque fashion (i.e., few people had access to the staff letters in question) the age old regulatory device of limiting speculative influences on commodity markets that finds their origin on the Commodity Exchange Act of 1936. Swaps dealers, who, for these purposes, have no commercial interests, were, by this staff level exemption, able to avoid speculation limits on their transactions. The crude oil markets thereafter became dislodged from supply and demand fundamentals, because the speculation engendered by laying off risk from the swaps index funds had no limitations placed it.

B) Did you review any such exemption letters during your tenure?

No.

C) Shouldn't hedging exemptions be limited to those who have a bona fide risk related to the purchase and sale of physical commodities like oil or corn?

Yes, it is beyond dispute that the fundamental purpose of the Commodity Exchange Act was that hedging exemptions should be limited to "bona fide" physical hedgers. Senator Lieberman and Collins' Commodity Speculation Reform Act of 2008 (introduce don July 10, 2008) does an excellent job of defining the characteristics of a "bona fide" hedger. This proposed legislation would amend current legislation to restrict the hedging exemption to parties that are entering into transactions for the purpose of mitigating the risk associated with fluctuations in the price of owned commodities or liabilities. Therefore, those parties currently laying off risk through the "commercial hedgers" exemption would be required to be in possession of the physical commodity or be subject to the risks associated with fluctuations in the value of the underlying goods. This legislation would effectively return the commodities markets to physical hedgers, the market's original and intended principal participants.

D) If Congress were to narrow such exemptions to only allow bona fide physical hedging, would this adversely affect market liquidity?

No, limiting the hedging exemptions to bona fide physical hedgers would not adversely affect liquidity. Chairman Stupak in his opening remarks at the June 23rd Energy Speculation and Regulation Part II hearing presented a chart that illustrated that speculators had grown from 37% of the WTI market in 2000 to" 71% of the market in April 2008. At the hearing, Chairman Stupak posed the question of how much liquidity the market needed to Fidel Gheit, an oil market analyst from Oppenheimer and Co. Mr. Gheit estimated "less than 20%" liquidity. Analysis of Chairman Stupak's data and Mr. Gheit's estimate of essential liquidity would lead to the conclusion that the market, as of June 23, 2008, was saturated with liquidity. Therefore, a reduction in the level of speculation created by restricting the hedging exemption to physical hedgers would not adversely affect the market operations. Ultimately, curbing speculation levels would return the market to physical hedgers and market fundamentals.

The commodities futures market no longer assists the physical hedgers it was intended to serve because of these new inflows of speculative capital resulting from index funds. Richard Steenland, President and CEO of Northwest Airlines, testified at the Energy Speculation and Regulation Part II hearing that, "[Northwest] hedge[s] today where we can. It's not very attractive at these prices, but when you consider what the -- what the run-up is, you know, we look to basically buy some insurance policy against prices going even higher." Mr. Steenland and his colleagues on the panel all told the House committee that speculators trading "video or paper barrels" dislodged the market from market fundamentals to the point where hedging was becoming no longer worthwhile. Under the long history of the Commodity Exchange Act, it was never envisioned that producers and end-users would be unable to hedge due to the activities of parties that do not actively deal in the underlying commodity. It was the foremost purpose of the Commodity Exchange Act that excessive speculation be limited to ensure just enough to create liquidity, but not so much speculation that the markets would be severed from commercial fundamentals.

2) Your testimony warns about the risks of having a trader spreading its positions over multiple markets and accumulating a disproportionately large position, while satisfying each exchange's separate limits. That could take place with oil contracts on ICE Futures and NYMEX, for example. Is that a weakness which CFTC can correct administratively, or does that have to be remedied by legislation?

The CFTC has the authority under the Commodity Exchange Act to do this administratively. With regard to ICE, it could do this either by rescinding the no action letter (as it has the absolute right to do under the terms of that document) to make ICE a U.S-designated contract market to which speculative limits could be directly applied. It could easily do so on the ground that ICE is controlled from its headquarters and by its parent company in Atlanta; ICE's trading engines are in Chicago; it trades on U.S. terminals a contract premised on U.S. settled prices of a U.S. delivered commodity in U.S. denominated dollars. Alternatively, as the CFTC's June 17, 2008, letter to ICE regarding speculation limits makes clear, the CFTC could achieve this reform through the imposition of the appropriate conditions to its ICE no action letter. In the absence of the CFTC doing this administratively, the kind of legislation proposed by Senate Majority Leader Reid's Stop Excessive Energy Speculation Act of 2008, S.3268, will accomplish this result. S. 3268 was introduced in July by the Senate Democratic leadership and it failed to sustain a cloture vote late in that month on a 50-43 vote in favor of cloture.

3) Should the size of position limits be set relative to open interest at a given point in time during the month?

Position limits linked to the number of open contracts on a particular market is a less desirable form of regulatory oversight. The best method of regulating these markets is to impose aggregated position limits directly on U.S.-traders and U.S. trading, thereby imposing limits that would control trading in every market (whether regulated or unregulated and wherever located) irrespective of the open interest on any single exchange. This is the regulatory approach taken in the Commodity Speculation Reform Act of 2008, proposed by Senators Lieberman and Collins on July 10, 2008, and in S.3268, proposed by Senator Reid and other Senate Democratic leaders in July 2008.

4) Should position limits be reduced for index investors to reduce their impact on the futures market?

Yes, passive index speculators should be subject to position limits to reduce their adverse impact on the commodities markets, because swaps dealers lay off their speculative risk by using the swaps exemption to purchase all of the contracts they desire on NYMEX, thereby encouraging unlimited speculation through their index funds. Index speculators may enter into an unlimited number of contracts; in turn, swaps dealers buy corresponding and unlimited off setting positions in the commodities market. The swaps dealer hedging in the commodity markets is purely speculative. In order to return the commodities markets to physical hedgers and end users, such flows of money through this swaps channel must be curbed. For example, Michael Masters' May 20, 2008 testimony noted that investments from index speculators have increased from $13 billion in 2003 to $260 billion as of March 2008. (For the most recent corroborative data, see http://www.stopoilspeculators.com/PDF/huntbrothers-act2.pdf).

Such substantial inflows of cash have dislodged the market from traditional market fundamentals by creating additional speculative demand. Therefore, index speculators should be subject to position limits to reduce the effects of their investment strategies on American households and businesses.

5) NYMEX's open interest for the WTI contract is 3 times the size of open interest on ICE Futures Europe. For purposes of the no action letter conditions, should the NYMEX speculative position limits be the same as ICE Futures Europe? Or should the ICE Futures position limits be proportionally smaller?

The most effective method of managing position limits is by setting aggregated position limits on U.S. trading across all markets. Aggregated position limits prevent market participants from circumventing position limits imposed on regulated exchanges by transferring their strategies to unregulated exchanges, as Amaranth did in 2006. The aggregation of market participants' contracts allows investors the freedom to operate on their exchange of choice while still complying with an overarching limit on commodity speculation. If Congress is able to pass these measures, an effective position limits system would be established and there would be no need for a system of positions limits tied to one exchange's volume.

6) The Senate Permanent Subcommittee on Investigations issued a critique of your testimony before the Senate Commerce Committee. Please provide a copy of that critique and your response.

It should be noted that the above referenced critique was not issued by the *members* of the Senate Permanent Subcommittee on Investigations, but by its *staff*. The staff critique can be found at:

http://hsgac.senate.gov/public/_files/PSIJtSTAFFANALYSISGREENBERGERTESTIMONYONJUNE32008.pdf

My response to this critique is set out in full below. I should add that while that critique was addressed to testimony I delivered on June 3, 2008 to the Senate Commerce Committee, I was subsequently asked, despite the Senate staffers "critique," to testify five times before a variety of House and Senate Democratic Committees, including being asked on June 25, 2008 to brief the House Democratic leadership and on July 10, 2008 to address the Senate Democratic leadership with regard to need to pass legislation controlling excessive speculation in the crude oil and agricultural markets. The staff "critique" was premised upon my point on June 3, 2008 to the Senate Commerce Committee that the "End the Enron Loophole" proviso on the 2008 Farm Bill, which was principally drafted by the Subcommittee staff writing the "critique," did not, in fact, close that loophole. My point on June 3, 2008 has been supported by the dozens of bills introduced in June and July 2008 designed to fully close the Enron Loophole despite passage of the Farm Bill, recognizing that the Farm Bill did meet the objective of fully closing the Enron Loophole. The lead Senate bill, S. 3268, introduced in mid-July by Senators Reid and four other Senate Democratic leadership members would have closed the Enron loophole, but failed to sustain a cloture motion on a 50-43 vote. It doubtless will be received more favorably in the coming Congress. On August 18, 2008, the House did pass its own legislation (H.R. 6604) by an overwhelming 283-133 vote that would have fully closed the Enron loophole. On June 21, 2008, President-elect Obama, during his Presidential campaign, promised to fully close the Enron Loophole. In short, my June 3 2008 thesis about the shortcomings of the Farm Bill proviso, which was obviously not well received by those staffers who had advertised that had fully closed the Enron Loophole at that time, has now been almost universally accepted. Indeed, the only proponents of the staff "critique" have been: (1) Republican members of Congress when they have argued against the passage of the Senator Reid and House legislation designed to fully close the Enron Loophole, e.g., S. 3268 and H.R. 6604; and (2) by the Intercontinental Exchange itself, which as my response below makes clear was the original proposer of the limited Farm Bill proviso – a bill that if implemented (and to date it has not been implemented) would only have had minimal regulatory impact on ICE. Finally, while the staff "critique" (and ICE) attempts to belittle my June 3, 2008 prediction that crude oil would drop by 25% when speculative impulses were controlled, it is highly ironic that, as this answer is written, crude oil has dropped within a few months from the mid-July high of $147 to well below $60 or an almost $90 drop. As it turns out, I should have been "critiqued" for being far too conservative.

Again, my answer to the staff "critique" is immediately below:

July 9, 2008

The Honorable Collin Peterson
Chairman
House Committee on Agriculture
1301 Longworth House Office Building
Washington, DC 20515

Re: Answer of Professor Michael Greenberger to the June 24, 2008 PSI Staff Analysis of His June 2008 Senate Testimony

Dear Chairman Peterson:

You have asked that I respond in writing to the June 24, 2008 Joint Analysis of the Majority and Minority Staffs of the United States Senate Permanent Subcommittee on Investigations ("PSI") of my June 3, 2008 testimony before the United States Senate Committee on Commerce, Science and Transportation.

At the outset, after having reviewed the PSI staff analysis, I feel even more confident about my testimony and the recommendations and conclusions reached therein for the reasons described in detail below. As you know, you have invited me to testify on both July 10 and 11, 2008 at your Committee's hearings to discuss whether there is excessive speculation in the crude oil futures markets and, if so, what kind of legislation might remedy that problem. In the course of my testimony on those scheduled topics of discussion, I am fully prepared to answer any questions the Members of the Committee may wish to pose to me about this letter or the PSI analysis itself.

The Issue about Which There Is Disagreement

As I show below, since I first testified on this subject on December 12, 2007, my basic point has been that prior to the enactment of the Enron Loophole on December 20, 2000, *all* U.S. traded energy futures contracts based on U.S. delivered energy commodities, including standardized energy swaps agreements, were required to be executed on a U.S. regulated exchange. Those exchanges were directly overseen by the U.S. Commodity Futures Trading Commission ("CFTC") under the Commodity Exchange Act ("CEA") and by each exchange's elaborate self regulatory surveillance systems. That CFTC and self regulatory oversight was designed by Congress to prevent excessive speculation and manipulation in these markets. I have therefore urged that closing the Enron Loophole should therefore mean returning all U.S. energy futures contracts to the status quo ante on December 19, 2000, the day before the Enron Loophole went into effect.

As I further show in detail below, the "Close the Enron Loophole" amendment within the recently enacted Farm Bill does not automatically return all U.S. energy futures trading to U.S. regulated exchanges. Rather, it allows the CFTC to place on a contract-by-contract basis any of the thousands of presently unregulated U.S. energy futures contracts (but not the rapidly growing multi-billion dollar standardized U.S. energy swaps market) back under the CEA"s regulatory regime *if* the CFTC "*in its discretion*" decides to demonstrate, pursuant to notice and comment procedures and judicial review provisions dictated by the Administrative Procedure Act and administrative law procedural cases, that the contract serves a "significant price discovery function." Section 13201 of that statute provides detailed statutory criteria in sections 13201 (b) to establish through informal rulemaking required under that section and 13204 (b) the way in which "significant price discovery function" requirements should be made by the CFTC.

The Farm Bill Amendment affords the CFTC 9 months to develop criteria by notice and comment rulemaking to govern its "significant price discovery function" determination and then 6 months to apply those criteria to the energy contracts the CFTC decides "in its discretion" are subject to the legislation. That would mean that the Farm Bill's regulatory infrastructure is not required to be in place until September 2009.

As I demonstrate below, the administrative requirements that must be complied with by the CFTC in promulgating and applying its rule, and the likely judicial review of those actions to follow by those many parties (both energy traders and consumers) adversely affected by any CFTC decision of this kind will likely further prolong that Act's implementation.

Conversely, as I show below, by *legislatively* requiring that *all* energy contracts within a U.S. regulatory format, as was true before passage of the Enron Loophole, the administrative and litigation target would shrink. Energy consumers will have little about which to complain. And, those opposed to reregulation will not have *administrative* action to attack procedurally or substantively, but they will be forced to demonstrate that a federal statute enacted pursuant to the Commerce Clause, to ensure financial stability in these markets critically important to the well being of this Nation's economy, has no rational basis -- a standard universally understood to be very difficult for someone challenging Congressional action to meet.

As I show below, out of the "thousands"[1] of contracts traded on the U.S. owned Intercontinental Exchange ("ICE") now outside the scope of U.S. contract market regulation, the CFTC has now at least twice publicly stated that *only* ICE"s benchmark Henry Hub natural gas contract on that exchange will be subject to reregulation. The reregulation of that contract has no bearing on crude oil, gasoline, or heating oil prices.

Despite the plain language of the Farm Bill amendment, the CFTC has taken the position that the trading of ICE's U.S. benchmark crude oil contract (which covers @ 30% of the trading in that U.S. futures market) will not be subject to reregulation under the Farm Bill amendment.

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[1] Statement of ICE Chairman and CEO, Jeffrey Sprecher, Commodity Futures Trading Commission, Public Hearing On Exempt Commercial Markets 113 (Sept. 18, 2007) (unpublished manuscript, on file with Anderson Court Reporting).

The CFTC contends that ICE, for purposes of trading of that U.S. benchmark contract on U.S. terminals, is a "foreign" exchange because its wholly owned London subsidiary has been assigned by its U.S. parent intra-corporate oversight of those U.S. terminals. The CFTC has reached this decision despite the fact that: ICE is headquartered in Atlanta, Georgia; the electronic server matching the ICE WTI trading is located in Chicago; and the overwhelming majority of the ICE WTI trading is conducted on trading terminals located within the U.S.

In sum, the Farm Bill Amendment, which was brought to the Senate floor on December 13, 2007, certainly does not now meet the challenges presented today by the dire economic circumstances faced by the U.S. consumers of crude oil and its derivatives (e.g., gasoline and heating oil), *i.e.*, it does not require administrative action for 15 months; it places the burden on the CFTC "in its discretion" to prove that a contract should be reregulated subject to time consuming administrative and judicial constraints; it will only apply to ICE"s natural gas futures contract according to public statements by the CFTC; and it does not apply to the billions of dollars being traded by U.S. swaps dealers executing standardized energy futures contracts.

In this regard, I agree with PSI staff's assertion in its analysis (at 2) that I am now "proposing a return to the legal framework for commodity trading prior to the enactment of the" Enron Loophole, when all U.S. energy futures, including standardized energy swaps, were required to be executed on a CFTC regulated contract market. I make this recommendation in the wake of the financial crisis in which this country finds itself because of rapidly skyrocketing oil, gasoline, and heating oil prices.

Legislative Support for Returning to Complete Regulation of the U.S. Energy Futures Market

My analysis is consistent with the approach of one of PSI"s members. On June 22, 2008, Senator Obama announced a plan that "*fully* closes the Enron loophole and restores common-sense regulation as part of my broader plan to ease the burden for struggling families today while investing in the future."[2] Governor Jon Corzine of New Jersey, a former Chairman of Goldman Sachs and former Senator from New Jersey, was Senator Obama's principal spokesperson when the proposal was released and he expressly endorsed the proposal to close the Enron Loophole fully.[3] In addition, Senator Nelson's proposed legislation (S. 3134), whose cosponsors include Senator Obama, adopts the very legislative language that I had proposed in my June 3, 2008 testimony that is the subject of PSI staff criticism. Similarly, I have been informed that another member of the PSI committee has joined as a co-sponsor of S. 3205, the 2008 PUMP Act, which also completely closes the Enron Loophole by requiring all U.S. energy futures and swaps trading to be done on U.S. regulated markets.

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[2] *Obama Announces Plan to Fully Close the Enron Loophole, Crack Down on Excessive Energy Speculation*, (June 22, 2008), *available at* http://www.barackobama.com/2008/06/22/obama_announces_plan_to_fully.php (last visited July 7, 2008).

[3] Caren Bohan, *Obama vows to crack down on oil speculation*, REUTERS, June 22, 2008, *available at* http://www.reuters.com/article/politicsNews/idUSN2243134220080622 (last visited July 7, 2008).

Just three days after Senator Obama issued his proposal to fully close the Enron loophole, Senator John McCain stated: "We must purge the market of the reckless speculation, unrelated to any kind of productive commerce that has inflated the price of gasoline -- at the expense of working men and women across our country. . . I intend to assure integrity in oil-futures trading, and to protect the public interest."[4]

As your invitation to testify at your Committee's July 9-11 hearings makes clear, there are many members of both the House and Senate who do want to return to the regulatory environment in effect before the Enron Loophole was passed and promptly bring all U.S. traded energy futures under the CEA"s requirements for a CFTC approved contract market. The concept underlying that legislation has been endorsed by the many corporate consumers of crude oil and its derivatives that are in serious financial distress because of skyrocketing fuel prices, many of whom are now strongly and explicitly urging Congress to completely close the Enron Loophole.[5]

Seven Examples of Errors in the PSI Staff Analysis

I will respond below in detail to the substantive critique of the PSI staff on my June 3, 2008 testimony. As a preface to that discussion, however, I want to highlight quickly seven examples of a series of errors within that PSI staff document.

1. The PSI staff criticizes me (at 11) for concluding that prior PSI studies about energy markets deregulated by the Enron Loophole focused on manipulation of those markets. While much could be extracted from those reports to prove my point, perhaps the clearest support comes from the PSI Chairman who states, for example, that the 2006 report pertaining to *Rising Oil and Gas Prices: A Need to Put the Cop Back on the Beat*, "recommended new laws to increase market oversight *and stop market manipulation*."[6]

2. On page 10, the PSI states that that I am in error about CFTC approval of the Dubai Mercantile Exchange ("DME") trading the WTI contract: "The CFTC has yet to grant the DME permission to use trading terminals in the United States for the trading of its WTI contract . . ."

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[4] Transcript, McCain's Remarks in Las Vegas, N.Y. TIMES, June 25, 2008, *available at* http://www.nytimes.com/2008/06/25/us/politics/25text-mccain.html?pagewanted=2&fta=y (last visited July 7, 2008).

[5] *See* Letter from Air Carriers Association of America, Air Line Pilots Association, Airports Council International, Air Transport Association, Air Travelers Association, American Association of Airport Executives, American Society of Travel Agents, Association of Professional Flight Attendants, Industrial Energy Consumers of America, International Association of Machinists, International Brotherhood of Teamsters, National Air Traffic Controllers Association, National Business Travel Association, National Farmers Union, Regional Airline Association, to H.R. Bart Stupak, Chairman of Subcommittee on Oversight and Investigation, (June 20, 2008).

[6] http://www.senate.gov/~levin/issues/index4.cfm?MainIssue=Energy&SubIssue=GasolinePriceInvestigation. (emphasis added) (last visited July 7, 2008).

Yet, Dr. James Newsome, president of NYMEX (a DME founder and its partner in establishing DME“s U.S. terminals) and a DME board member, clearly stated on May 16, 2008: "A cash settled contract on the WTI has been approved by the CFTC." On June 23, 2008, before a House Energy subcommittee, Dr. Newsome elaborated: "Although the DME does not yet list a WTI financial futures contract, *the DME has received a no action letter from CFTC staff for this contract* . . . The DME is currently finalizing a launch date for that contract."[7]

3. On page 4, the PSI states that "[t]he CFTC has not made any statements or provided any indication of the number of commodities or contracts" ultimately to be covered by the Farm Bill amendment. Yet, CFTC reports and testimony repeatedly have limited the implementation focus of that statute to the ICE Henry Hub natural gas futures contract: "In the CFTC report that accompanied [Acting Chair] Lukken“s testimony, the *only* ICE contract [cited] as serving a significant price discovery function is the one that settles on the closing price of the Henry Hub futures contract."[8] On December 12, 2007, Acting Chair Lukken further testified: "Testimony from the Commission's hearing and staff analysis on this subject led us to conclude that *one* ECM contract on the Intercontinental Exchange (ICE) is serving a significant price discovery role . . ."[9] It was because of these CFTC statements that I said in my written June 3 testimony that the CFTC had asserted that "crude oil, gasoline, and heating oil" will not be affected by the legislation since ICE is the major unregulated energy futures exchange trading those contracts. The PSI analysis concludes on this point: "[I]nformed observers indicate multiple contracts are likely to qualify for CFTC oversight." No support is cited for that proposition and certainly there could be none as authoritative as those of the Acting Chair of the CFTC in reports and testimony presented to committees of Congress. If "multiple contracts" are going to be regulated under new enactment, they would, under the CFTC“s analysis, have to be outside of the ICE umbrella. The only candidates would be the swaps dealers“ energy index funds.[10] And, neither the CFTC nor the PSI staff has argued that swaps dealers, such as Goldman Sachs, should be regulated under the Farm Bill amendment.

4. On pages 5-6, the PSI asserts: "Prior to the Commodity Futures Modernization Act (CFMA), large traders trading financial instruments like collateralized debt obligations, credit

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[7] *See* Written Testimony of Dr. James Newsome, *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II: Hearing Before the H. Subcomm. on Oversight and Investigations,* 6 (June 23, 2008) *available at* http://energycommerce.house.gov/cmte_mtgs/110-oi-hrg.062308.Newsome-testimony.pdf (emphasis added) (last visited July 7, 2008).

[8] CFTC calls on Congress to legislate oversight of exempt energy derivatives markets, Platts Inside FERC (October 29, 2007) (emphasis added) [hereinafter Platts Inside FERC].

[9] *See* Written Testimony of Acting Chair Walter Lukken, *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?: Hearing Before the H. Subcomm. on Oversight and Investigations,* 4 (Dec. 12, 2007) *available at* http://www.cftc.gov/stellent/groups/public/@newsroom/documents/speechandtestimony/opalukken-32.pdf (emphasis added) (last visited July 7, 2008).

[10] *See* Written Testimony of Michael Masters, *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II: Hearing Before the H. Subcomm. on Oversight and Investigations,* 6 (June 23, 2008) *available at* http://energycommerce.house.gov/cmte_mtgs/110-oi-hrg.062308.Masters-testimony.pdf (last visited July 7, 2008) (emphasis added) [hereinafter June 23, 2008 Testimony of Michael Masters].

default swaps, and energy swaps were eligible for the hybrid and swaps exemption from the requirement that all futures contracts be traded on a regulated futures exchange. See, e.g., 17 C.F.R. Part 35 (Exemption of Swaps Agreements)." However, as the regulation cited by PSI staff and the academic commentary on it makes clear, those exemptions *only* applied "if all contracts were negotiated as to their material terms (unlike futures contracts, where terms are standardized) and if all contracts were held to maturity (rather than traded rapidly, as futures are.)"[11] As the leading treatise in this area provides, the 1992 statute cited by the PSI staff which authorized the swaps exemptions only permitted exemptions for swaps that are not "standardized as to their material economic terms, to the extent that such agreement may be regarded as subject to the Act," *i.e.*, futures contracts.[12] As the PSI staff has concluded elsewhere: "A futures contract is a standardized contract," because "standardized contracts can be more easily traded than individually negotiated contracts. They can be traded many, many times to many different people."[13] The liquidity needed to trade most credit default swaps, collateralized debt obligations, and the energy swaps at issue (e.g., those index funds sold by swaps dealers such as Goldman Sachs) mean that they cannot be held until maturity nor can they be standardized as to their material terms. It was for that reason that the swaps dealers, *inter alia*, lobbied for the passage of the CFMA, *i.e.*, to free these products, which are not individually negotiated as to each material economic term, from pre-2000 regulated exchange trading requirements.

5. The PSI staff asserts (at 7-8) that based on their reading of the law: "Futures contracts traded from within the [U.S.] on a foreign exchange are, thus, excluded by statute from the requirement that futures contracts traded in the [U.S.] be traded on a futures exchange regulated by the CFTC." Yet, a June 17, 2008 CFTC staff letter to ICE Futures Europe substantially undercuts the PSI assertion that foreign exchanges cannot be required to register as fully regulated U.S. contract markets.[14] In that June 17 letter, the CFTC staff applied four new conditions to the 1999 no action letter under which ICE is allowed U.S. trading terminals within the U.S. without having to register as a CFTC regulated contract market. The CFTC staff concluded that letter by stating that, if ICE satisfies the new conditions, the CFTC staff "will *not* recommend that the [CFTC] institute enforcement action against [ICE] based upon [ICE"s] *failure to seek contract market designation or registration as a DTEF [--a U.S. regulated contract market--] under Sections 5 and 5a of the Act.*"[15] Of course, if the conditions are not

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[11] Mark Jickling, *Regulation of Energy Derivatives*, CRS REPORT FOR CONGRESS (Updated April 21, 2006).

[12] PHILLIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION, §1.02[2][C] at 19 (3d ed. 2004) (citing 7 U.S.C. §6(c)(5)(b)).

[13] PERMANENT SUBCOMMITTEE ON INVESTIGATIONS OF THE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS, EXCESSIVE SPECULATION IN THE NATURAL GAS MARKET 28 (June 25, 2007) [hereinafter June 2007 Report].

[14] For a complete examination of supporting case law, see Written Testimony of Professor Michael Greenberger, *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II: Hearing Before the H. Subcomm. on Oversight and Investigations* 9-11 (2008) [hereinafter June 23, 2008 Testimony].

[15] Amendment to No-Action Letter Issued to the International Petroleum Exchange of London (now ICE Futures Europe), CFTC No-Action Letter, (June 17, 2008) (emphasis added) [hereinafter June 17, 2008 CFTC Staff Letter],

complied with the obverse would be true, i.e., the CFTC staff would recommend an enforcement action for failure to register as a U.S. regulated exchange. In short, in contrast to the above quoted assertion by the PSI staff about the limited CFTC authority over foreign exchanges with U.S. trading terminals, that agency itself clearly believes that, in the absence of complying with the conditions it imposes on those foreign exchanges to permit avoidance of full U.S. contract market regulation, that agency has complete statutory power to *order* those foreign boards of trade with U.S. trading terminals to register as a U.S. contract market.

6. In its analysis, the PSI staff frequently quotes my June 3 oral testimony by sometimes using ellipses, misleading bracketed PSI additions or both, which takes my statements out of context. For example, on page 6 of its analysis, the PSI staff quotes me as saying in response to a question: "„Overnight [prohibiting the trading of energy commodities in Exempt Commercial Markets] will bring down the price of oil, I believe, by 25%." First, the PSI staff did not quote my following sentence: "Now, *there has to be a grace period* . . .,"[16] which I have recommended be 6 months. Second, my answer to that question was not limited as the bracketed material inserted by the PSI staff suggests to simply re-regulating ECMs; the answer was directed to closing *all* of the loopholes associated with these markets, including those afforded the multi-billion dollar energy futures trading of swaps dealers and foreign exchanges trading U.S. energy futures on U.S. terminals, such as ICE Futures Europe, which trades @ 30% of the U.S. WTI benchmark futures contract. Indeed, when Senator Pryor asked me at that hearing what the financial impact would be "if we did all the fixes you are recommending," which also included the beginning of an FTC investigation of these markets – a key subject in the FTC"s Senate committee of jurisdiction -- I made clear that my 25% estimate of the price drop was just that – an estimate.[17] Indeed, in the 2006 PSI staff report recommending putting "the cop back on the beat," the PSI favorably noted: "Several analysts have estimated that speculative purchases of oil futures have added as much as $20-$25 per barrel to the current price of crude oil, thereby pushing up the price from $50 to approximately $70 per barrel,"[18] or well over 25% of the price of crude oil at the time. Compared to this PSI estimate, my own on June 3 was quite conservative. More recent hearings have borne out the conclusion that my estimate was quite conservative compared to oil market experts who predicted, upon proper regulation of these markets, the price of a barrel would drop to at least $70.[19]

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available at http://www.cftc.gov/stellent/groups/public/@lrlettergeneral/documents/letter/08-09.pdf (last visited June 20, 2008).

[16] *See Energy Market Manipulation and Federal Enforcement Regimes: Hearing before the S. Comm. on Commerce, Science, and Transportation* (2008) at 86, *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1026&context=cong_test.

[17] 17 *Id.* at 89.

[18] Permanent Subcommittee on Investigations of the Committee on Homeland Security and Governmental Affairs, THE ROLE OF MARKET SPECULATION IN RISING OIL AND GAS PRICES: A NEED TO PUT THE COP BACK ON THE BEAT 2 (June 27, 2006) [hereinafter Permanent Subcomm. June 2006 Report].

[19] *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? – Part II: Hearing Before the Subcommittee on Oversight and Investigations of the United States House* (June 24, 2008) (Mr. Masters stated that if

7. Moreover, the PSI staff criticizes (at 6) my oral June 3 statement that "there are no speculation limits in these markets that are unregulated." The staff then cites a June 16, 2008 CFTC statement saying *for the first time* that it would impose conditions on ICE Futures Europe "to implement speculation limits." While I testified on June 23 about the inadequacy of that new June 16 CFTC condition,[20] the point here is that on June 3, 2008 I did not have the CFTC announcement of thirteen days later in front of me. Similarly, I am criticized by the PSI staff (at 10) for not taking into account in my June 3, 2008 testimony legislation introduced nine days later on June 12, 2008.[21]

Why Congress Should Now Require That All U.S. Energy Futures Contacts Be Traded on U.S. Registered Contract Markets

As mentioned earlier, my view that the Farm Bill amendment must be revised, especially as viewed from the present and immediate crisis crippling our economy, is premised on the need to return energy futures regulation to where it was before the Enron Loophole was enacted on December 20, 2000. The PSI staff is therefore correct when it asserts at page 5 that I want to "return to the legal framework for commodity trading prior to the ["Enron Loophole"], by requiring "energy and metal commodities to be traded the same way as agricultural commodities; . . ." As the leading treatise on futures regulation makes clear, prior to the passage of that 2000 statute, "all futures activity would be confined by law (and eventually subject to criminal activity to [CFTC regulated] exchanges alone."[22] And, in this regard, I now support the legislation that would return to this fundamental principle for energy futures contracts.[23]

Before I answer the PSI staff's criticism of returning to regulatory format in existence immediately prior to the Enron Loophole, I want to answer its contention that the Farm Bill amendment in today's urgent circumstances adequately provides for reregulation of all critically important energy futures contracts. In this regard, the PSI staff states (at 2) that the Farm Bill amendment "regulates all types of energy and metal commodities on Exempt Commercial Markets without exception, including crude oil, gasoline, and heating oil, if the relevant contracts perform a significant price discovery function." Moreover, it states (at 3) that "the law explicitly gives the CFTC the 'discretion' to determine which contract perform significant price discovery functions and are subject to CFTC oversight."

Congress enact legislations adopting [necessary] regulatory changes, the price of retail gasoline will go down to $65 or $70 within 30 days); (Mr. Krapels stated that the price would go down more quickly than Masters" estimate to $65 or $70); (Mr. Diwan stated that the price would be slightly higher than Masters" estimates); (Mr. Gheit stated that the price would be around between $45 and $60).

[20] *See* June 23, 2008 Testimony, *supra* note 14 at 19-25.

[21] 110 CONG REC. S.5592 (daily ed. June 12, 2008) (S.3129 introduced). While the staff only states that S. 3129 was introduced "[i]n June" without giving a date, that bill was in fact introduced on June 12, 2008, or nine days after I testified.

[22] PHILIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION 27 (Cumm. Supp. 2008).

[23] *See* H.R. 6341, 110th Cong. (2008); H.R. 6330, 110th Cong. (2008); S. 3205, 110th Cong. (2008); S. 3134, 110th Cong. (2008).

While these statements are true, my concern about the scope of the Farm Bill amendment, especially when viewed in light of the present crippling surge in gas and heating oil prices, is that, rather than putting all energy contracts under CFTC supervision, as was the case before the Enron Loophole passed, now the CFTC has the "discretion" to decide on a contract-by-contract basis to which of the manifold unregulated contracts perform "a significant price discovery function." In that regard, the PSI staff itself has stated that "the primary purposes of futures contracts are to allow market participants to protect themselves against future price changes and provide a market based mechanism for price discovery."[24] Therefore, all futures contracts serve a price discovery function, but only those which can meet the Farm Bill's heightened definition of "*significant*" will now be regulated.

Again, as I have stated above (and despite the PSI staff's argument to the contrary), the CFTC has repeatedly said that only ICE"s Henry Hub natural gas futures contract will satisfy its application of the "significant price discovery function" statutory standards.[25]

Moreover, the PSI staff implies (at 3) that "significant price discovery function" decisions will be carried out with a sense of urgency under the Farm Bill amendment, by emphasizing that those decisions must be made "within 180 days of promulgating regulations setting forth the criteria to be considered" for determining "significant price discovery" contracts. What the staff does not say, however, is that under the Farm Bill amendment the CFTC initially has 270 days (or 9 months) to "set forth" by rulemaking "the criteria to be considered" to apply the "significant price discovery function" test,[26] and, only then will the 180 days given for implementation begin to run, thereby allowing 450 days to pass before the CFTC is required to implement that statute.

Decisions Made Under the Farm Bill Amendment Will Be Subject to Administrative Procedures and Judicial Review

Challenging my assertion to the contrary, the PSI staff contends (at 3) that there will be no other delay (other than the prospect of the above mentioned statutorily established implementation period of up to 15 months) imposed on the CFTC in making its "significant price discovery function" determinations, because none of it actions are subject to the requirements of the Administrative Procedures Act ("APA"); nor can the CFTC be challenged judicially in its decision-making in this regard.

There is not a word in the statute that expressly exempts the CFTC from complying with the APA or exempts it from judicial review. The PSI staff argues (at 3) that because the statute gives the CFTC "discretion" to decide which energy futures contracts will be reregulated, "formal administrative hearings are not required and judicial challenges are not permitted."

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[24] June 2007 Report *supra* note 13, at 28.

[25] *See supra* pages 2, 5, 9.

[26] Food Conservation and Energy Act of 2008, Pub. L. No. 110-246, § 13204; 122 Stat. 1651 (2008).

However, the Farm Bill amendment expressly requires that the standards governing the "significant price discovery function" be implemented by a rulemaking.[27] Therefore section 553 (c) of the APA"s informal notice and comment rulemaking requirements must be followed.[28] The CFTC does not have discretion to avoid that, because the informal rulemaking provision "requires"[29] all rules (except those exempted for reasons not at issue here) to follow the express procedures of section 553 (c).[30]

Once section 553 (c) applies, the CFTC must afford notice, a meaningful opportunity to comment, and a meaningful response to the comments filed.[31] Moreover, once section 553 (c) is triggered, the decision is subject to the judicial review standards of the APA.[32] Under that review, the agency must have complied with specific statutory criteria in its governing statute, which in this case has detailed standards[33] to control the imposition of the significant price discovery function, and the development and application of those criteria cannot be arbitrary and capricious.[34] Finally, under section 501 of the APA defining a rule, that implementation of a rule itself requires rulemaking.[35] Therefore, once the general rulemaking is completed, implementation of the rule to energy futures contracts must itself be governed by section 553 (c).

Moreover, even if section 553 (c) did not apply, it is clear that, even if the agency has discretion, if the court has "law to apply" to ensure that that discretion is exercised consistent with Congressional requirements, that discretion is reviewable by a court.[36] The "laws to apply" here are the exacting specific criteria within section 13201 (b) of the Farm Bill, which must be applied by the CFTC in developing and exercising its significant price discovery function determinations. These are the very kind of "intelligible principles" against which courts traditionally judge whether the agency's exercise of discretion satisfies the statute.[37]

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[27] 27Food Conservation and Energy Act of 2008, Pub. L. No. 110-246, §§ 13201 (b), 13204 (b); 122 Stat. 1651 (2008).

[28] 5 U.S.C. § 553 (2008).

[29] ALFRED C. AMAN, JR. & WILLIAM T. MAYTON, ADMINISTRATIVE LAW 39 (2ND ED. 2001).

[30] 5 U.S.C. § 553 (2008).

[31] 5 U.S.C. § 553 (b)-(e) (2008).

[32] 5 U.S.C. §§ 702, 704, 706 (2008).

[33] Food Conservation and Energy Act of 2008, Pub. L. No. 110-246, § 13201 (b)(7)(B)(i)-(v); 122 Stat. 1651 (2008) (stating that these standards include: "price linkage," arbitrage," "material price reference," and "material liquidity").

[34] 5 U.S.C. § 706 (2) (A)-(D) (2008).

[35] 5 U.S.C. § 551(4)-(5) (2008).

[36] *See* Webster v. Doe, 486 U.S. 592, 599-600 (1988) (quoting Heckler v. Chaney, 470 U.S. 821, 830 (1985) (holding that "review is not to be had if the statute is drawn so that a court would have no meaningful standard against which to judge the agency's exercise of discretion.")).

[37] Drake v. FAA, 291 F.3d 59, 72 (D.C. Cir. 2002); *see, e.g.*, J.W. Hampton, Jr., & Co. v. U.S., 276 U.S. 394, 409 (1928).

Again, if the agency action is governed by specific statutory criteria, as is true of section 13201 (b), then the exercise of agency discretion is wholly reviewable in the courts and cannot be arbitrary and capricious.[38]

Moreover, in this case, the CFTC, acting pursuant to the Farm Bill amendment, may either move previously unregulated exchanges and contracts to regulated markets; or it may reject the arguments of industrial consumers of energy, such as the airlines, to reregulate futures contracts upon which that industry's economic survival may very well depend. These are self evidently constitutionally protected property interests and, even if not directly required by the APA, the courts have made it clear that there is a Constitutional due process right to notice and comment here independent of the APA.[39]

Moreover, it is equally unavailing·for the PSI staff to rely on the following statement made by a Senate draftsman during the Senate debate: "[T]his determination is not intended to be subject to *formal* challenge through administrative proceedings." (Emphasis added.) That proposition only restates the obvious, *i.e.*, that significant price discovery function decision making is not subject to the *formal* "on the record" rulemaking or adjudication requirements of the APA, which require a full trial type proceeding.[40] Therefore, that comment by the Senator does not mean that the CFTC decision would escape the notice and comment requirements of the APA for *informal* agency action under section 553 (c) or judicial review thereof. Courts do not lightly infer that Congress has terminated judicial review.[41] "[C]lear and convincing" evidence must be presented that Congress forbade judicial review.[42] That evidence is not found within the Farm Bill amendment; nor within the single sentence cited by the PSI staff in the legislative history – a sentence that does not say anything about judicial review, but only refers to the kind of administrative procedure to be employed.

Finally, it cannot possibly be that each of the many parties (including the many financial institutions *trading* on unregulated exchanges or industrial consumers, such as airlines, seeking reregulation of energy futures contracts as a matter of economic survival) adversely affected by a CFTC decision at issue here would idly accept that result without vigorously seeking the full protection of the APA"s notice and comment procedures or without judicial review of CFTC"s action. With so much at stake pertaining to the national economy in this decision-making context, it is also hard to imagine a court allowing such a decision to be made without proper procedural protections or judicial review ensuring that that important decision was not "arbitrary and capricious."

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[38] 5 U.S.C. § 706 (2)(a) (2008); Cent. Tex. Tel. Coop. v. FCC, 402 F.3d 205, 211 (D.C. Cir. 2005); Robert M. Levin, *The Case for (Finally) Fixing the APA's Definition of "Rule,"* 56 ADMIN. L. REV. 1077, 1092-93 (2005).

[39] *See* Matthews v. Eldridge, 424 U.S. 319, 332-33 (1976); Goldberg v. Kelly, 397 U.S. 254, 267-68 (1970).

[40] 5 U.S.C. §§ 553 (c), 554, 556 (2008). See also Richard J. Pierce, Jr., Administrative Law Treatise 415 (4th Ed. 2002) (describing formal rulemaking procedures in which the agency must conduct a full evidentiary hearing).

[41] Socop-Gonzalez v. INS, 208 F.3d 838, 843 (9th Cir. 2000); Helgeson v. Bureau of Indian Affairs, 153 F.3d 1000, 1003 (9th Cir.1998) (quoting Traynor v. Turnage, 485 U.S. 535, 542 (1988) (holding that there is a "strong presumption that Congress intends judicial review of administrative action.")).

[42] Board of Governors of the Fed. Reserve Sys. v. MCorp Fin., 502 U.S. 32, 44 (1991); *e.g.*, Socop-Gonzalez, 208 F.3d at 843; Helgeson, 153 F.3d at 1003.

Again, if Congress were to now require that all U.S. energy futures contracts be regulated, as was the case prior to the Enron Loophole, there would be virtually nothing to challenge judicially. Any challenge would have to be lodged directly against the statute itself, because there would be no agency action to be reviewed under the APA"s arbitrary and capricious standard. Moreover, such a statute would self evidently fall within Congress" Commerce Clause powers, thereby making it quite difficult for traders and exchanges to challenge its legality in light of the exceedingly rational basis for imposing transparency on these critically important markets.[43] The "rational basis" standard is well understood to be very difficult for a plaintiff challenging a federal statute to meet.[44] Needless to say, U.S. energy consumers would have no cause to challenge judicially a statute requiring all energy futures contracts to be within the regulatory ambit of the CFTC.

Requiring Swaps Dealers to Trade on a Regulated Exchange Will Heighten Much Needed Transparency in the Energy Futures Markets

The PSI analysis critiques (at 5) my proposal to "return to the legal framework prior to the enactment of the "Enron Loophole," because that "approach would prohibit energy traders from trading financially settled swaps instruments on electronic exchanges that are not futures exchanges, . . ." If the PSI staff means that standardized energy swaps trades will have to be conducted on contract markets approved by the CFTC, their analysis of my desired result is correct. As has been mentioned above, there has been substantial criticism of the adverse effect swaps dealers have had in raising substantially both energy and food prices through their encouragement of speculative trading on energy and agricultural commodity markets.[45]

I would also add that the CFMA"s easing of contract markets registration requirements would also make it practical for swaps dealers to register their electronic facilities as regulated U.S. contract markets.[46] They therefore would not be required to leave the energy swaps market exclusively to the existing regulated U.S. exchanges.

The PSI staff analysis is incorrect (at 5), however, when it states that requiring all trading of standardized swaps contracts be regulated would "permit" swaps dealers to trade in an "unregulated" environment, such as "through voice brokers . . . using telephones and fax machines." If futures trading is conducted by telephone or fax machines, it does not escape the CEA"s registration requirements. The sweep of the definition of futures contract[47] does not stop at the door of a telephone conversation or a fax. If the agreements being reached by phone or by fax are the execution standardized contracts deriving their value from the price of an energy commodity, they, too, constitute futures trading which must be conducted on a regulated contract market.

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[43] Even in the Supreme Court's most cabined view of Congress' Commerce Clause powers, it made clear that Congress can regulate "those activities that substantially affect interstate commerce." *Lopez v. United States*, 514 U.S. 549, 559 (1995). It is well understood that the Nation's futures markets have such an effect and therefore Congress would be acting within its Constitutional "wheelhouse" with regard to reregulation of these markets.

[44] *See* Gordon G. Young, *Judicial Review of Informal Agency Action on the Fiftieth Anniversary of the APA: The Alleged Demise and Actual Status of Overton's Park Requirement of Judicial Review "On the Record,"* 10 ADMIN. L.J. AM. U. 179, 203 (1996) (describing the rational basis standard of review as "toothless").

[45] *See generally* June 23, 2008 Testimony of Michael Masters, supra note 10.

[46] PHILIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION 315 (2004).

The fact of the matter is that telephones and fax machines are simply too time consuming to create the needed real time liquidity in these markets that can be accommodated only by the speed of electronic trading. Therefore, even if voice brokers or telephone or fax trading were not covered by the Act, economic reality would prevent those devices from being a conventional and effective way of doing a futures business with the requisite liquidity needed by today's traders.

Finally, I have addressed above the PSI staff contention (at 5-6) that prior to the passage of the Enron Loophole, energy swaps were authorized by the CEA. As I mentioned above, the very statutory provision under which the 1993 energy swaps regulation was promulgated by its express terms did not allow such swaps to be standardized in any of its material terms.[48] The 1993 energy swaps exemption carefully followed the restrictions within that 1992 statute.[49] It was the very limited scope of that 1993 energy swaps exemption that led Enron to push for passage of the Enron Loophole, which authorized standardized energy futures contracts to be traded on an electronic trading facility.

Foreign Exchanges Accommodating Trades on U.S. Terminals Are Subject to the Commodity Exchange Act

The PSI staff argues (at 7-8) that, because of the 4 (a) (registration requirements do not apply to any exchange "located outside the United States") and 4 (b) of the Act (CFTC cannot apply CFTC rules that "govern in any way" foreign exchanges), ICE Futures Europe's trading of the WTI contract on U.S. trading terminals is correctly viewed as being outside the reach of the Act's jurisdictional scope.

However, even if the PSI staff were right about their reading of those section 4 provisions (and I show below they are not), why could Congress not have amended section 4 when it passed the Farm Bill in order to clearly extend the scope of that statute to trading on U.S. terminals of futures contracts premised on the price of U.S. delivered commodities by foreign exchanges?

Moreover, even if the PSI were right about section 4"s protection of foreign exchanges, the trading on ICE can not in any rational sense be deemed "foreign." In this regard, the PSI staff refuses to give any weight to its own analysis (at 9) that ICE Futures Europe is one of ICE"s "wholly owned subsidiaries" or that "ICE is a Delaware corporation located in Atlanta, Georgia. ICE pays U.S. taxes, uses U.S. employees and operates an exempt commercial market" in the U.S. Beyond the PSI staff's acknowledgement of ICE"s substantial ties to the U.S., ICE Futures Europe has trading terminals in the U.S.; its trading engines are in Chicago, Illinois; and it trades @ 30% of the U.S. WTI crude oil futures market. Whatever protection section 4 has for exchanges "located outside the United States," ICE is self evidently very much located here.

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[47] Futures trading is well understood to encompass any "contract for sale of a commodity for future delivery," and "the CFTC has made clear its intent to construe very broadly the meaning of" that phrase. PHILIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION 23-24 (2004).

[48] *See supra* at page 5.

[49] *See supra* at page 5.

And, as I have made clear on June 3, the underlying premise of the no action letter on which ICE and all other foreign exchanges rely is that, but for the no action letter, they are fully subject to U.S. CFTC regulation when they bring their trading terminals into the U.S. That was true when the no action letters were first issued in 1999;[50] when the CFTC issued its 2006 Policy Statement upon which the PSI staff mistakenly relies;[51] and it is true today as evidenced by the CFTC staff's June 17, 2008 letter to ICE Futures Europe expressly stating that the failure to comply with the four new conditions the CFTC imposed at that time on that "foreign" exchange would lead to a recommendation to "institute enforcement action against [ICE] based on [ICE"s] failure to seek contract market designation or registration as a DTEF under Sections 5 and 5a of the Act."[52]

The CFTC"s stance in its June 17 letter to ICE Futures Europe is in keeping with a host of federal cases and CFTC enforcement actions making it clear that the prohibitions upon which the PSI staff rests within section 4 pertaining to foreign exchanges only applies when *foreigners* trade *foreign* futures contracts in *foreign* countries on *foreign* exchanges that do not significantly impact U.S. markets.[53] I incorporate by reference my extensive analysis of these cases and orders in my June 23, 2008 testimony to the House Energy Subcommittee.[54]

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[50] As their plain language made clear when they were first issued in 1999, the foreign exchange no action letters originated from a rulemaking proceeding, that by it very terms, provided that permission to put terminals in the U.S. derived from Section 4 (c)"s exemption from U.S. contract market registration requirements and not from any statutory prohibition from regulating foreign exchanges "outside the United States." *See* LIFFE Administration & Management, CFTC No-Action Letter, 1999 CFTC Ltr. LEXIS 38, 4-5 (July 23, 1999); Access to Automated Boards of Trade (proposed rules), 64 Fed. Reg. 14,159, 14,174 (Mar. 24, 1999). As the proposed rules explained: Section 4(c) of the Act provides the Commission with authority "by rule, regulation, or order" to exempt "any agreement, contract or transaction" from the requirements of Section 4(a) of the act if the Commission determines that the exemption would be consistent with the public interest, that the contracts would be entered into solely by appropriate persons and that the exemption would not have a material adverse effect on the ability of the Commission or any contract market to discharge its regulatory or self-regulatory duties under the Act. *Id.* (internal citations omitted).

[51] "In the absence of no-action relief, a board of trade, exchange or market that permits direct access by U.S. persons might be subject to Commission action for violation of, among other provisions section 4 (a) of the CEA, if it were not found to qualify for the exclusion from the CDM designation or DTEF registration requirement. Boards of Trade Located Outside of the United States and No-Action Relief from the Requirement to Become a Designated Contract Market or Derivatives Transaction Execution Facility, 71 Fed. Reg. 64,443, 445 n.23 (Nov. 2, 2006).

[52] *See* June 17, 2008 CFTC Staff Letter, *supra* note 15.

[53] See the extensive discussion of relevant cases at pages 9-12 of my June 23, 2008 Testimony, *supra* note 14.

[54] *Id.*

The Substantial Role of ICE and the CFTC in Establishing the Framework of the "Close the Enron Loophole"

Finally, the PSI staff challenges (at 1-2) my assertion that the existing "Close the Enron Loophole" amendment found its genesis in the work of ICE, the principal party to be regulated, and the CFTC. In this regard, one only has to compare the CFTC"s legislative proposal as forwarded and endorsed by the PWG in a November 13, 2007 letter to Senator Crapo,[55] with the final version of the Farm Bill amendment.[56] These documents with a few (and in certain circumstances, as I show below, may be unhelpful) adjustments in the enacted version have a substantially identical regulatory format. Most importantly, the essential statutory structure of requiring that the CFTC to prove that a contract should be reregulated based on "a significant price discovery function" standard is derived from the CFTC proposal. Again, this is in contravention of the principle of returning to the regulatory format in existence prior to the Enron Loophole, *i.e.*, when all energy futures contracts were regulated. In fact, the adoption of the CFTC"s burden shifting device (i.e. it must be proved that an individual energy contract should be regulated) was done when it was by that time made a matter of record before Congress by the CFTC that of all of ICE"s "thousands" of contracts, only ICE"s Henry Hub natural gas contract would be eligible for reregulation.

Moreover, two of the principal changes added to the CFTC version of the Farm Bill made immediate and effective implementation of reregulation of energy futures contracts harder. First was the change that the CFTC need not fully implement the statute until 15 months after enactment or by September 2009.[57] The CFTC"s own proposal, by not including an effective date provision, suggested a willingness to immediately implement the "significant price discovery function" process upon enactment. Second, under the CFTC proposal it was *required* by the legislative language to reregulate a contract if it satisfied the "significant price discovery function" test. The final enactment left re-regulation "in [the CFTC"s] discretion."[58]

ICE's substantial influence in shaping the "Close the Enron Loophole" amendment is also a matter of public record. For example, the CFTC"s legislative proposal that formed the framework for the Farm Bill Amendment was presented to Congress on October 24, 2007.[59] That very day, in an Atlanta, Georgia issued press release, ICE"s Atlanta based Chairman and CEO Jeffrey Sprecher asserted: "*The spirit of [the CFTC and the PWG's] recommendations is largely consistent with the views we have expressed in several testimonies this year*. . . . We will continue to engage in dialog with regulators, the industry and Congress, and look forward to effectively resolving this long-standing matter."[60]

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[55] *See* Letter from the Board of Governors of the Federal Reserve System to Senator Michael D. Crapo, (Nov. 13, 2007).

[56] Food Conservation and Energy Act of 2008, Pub. L. No. 110-246, § 13201; 122 Stat. 1651 (2008).

[57] *See supra* page 3.

[58] *See supra* pages 1-3, 9.

[59] *CFTC proposal may apply to one ICE swap*, Platts Gas Market Report (November 2, 2007).

Contemporaneous with a late October hearing before the House Agriculture Committee on the CFTC‟s proposed legislation, ICE was reported to have "said it supports the proposal put forth by the CFTC. "The proposal is largely consistent with the testimony that we have given this year," said ICE spokeswoman Kelly Loeffler." It's our view that *we've arrived at recommendations that are workable given the complexities of the OTC market*. . . . [Jeffrey] Sprecher said [in his testimony] that applying a standard regulatory regime more broadly to all swaps contracts traded on ICE, either through application of principles ill-suited for illiquid trading markets, or by elimination exemptions altogether, *would be a serious mistake*."[61]

On December 12, 2007, the day before the "Close the Enron Loophole" amendment was added as a rider in the Senate to the Farm Bill, ICE‟s Atlanta-based Vice President and Chief Operating Officer Charles A. Vice testified:

> *Over the past several months, ICE has been working with members of Congress to create an enhance but appropriate level of oversight* over [over-the-counter] energy markets that . . . serve a price discovery function themselves . . . By appropriate, ICE means that any regulatory changes that are made need to reflect the varying nature of ICE‟s many OTCE markets and the key difference between contracts on ICE that serve a significant price discovery function and those that do not. . . .
>
> *ICE is complete agreement [with the CFTC proposal] and has been working with Congress and. . .the President's Working Group, for some months now on additional regulation for ECM's* . . .for contracts that are determined significant price discovery contracts. *And those are determinations that the CFTC for the most part has drafted and feel comfortable with, . . .*"[62]

Moreover, ICE had recommended that the CFTC apply any new legislation only to its Henry Hub contract in a public forum as early as September 18, 2007 during the CFTC's one day public meeting to discuss the status of the Enron Loophole. At that time, ICE's Chairman and CEO Jeffrey Sprecher, acknowledged that "a heightened level of DCM regulation, . . may be appropriate *for . . . our Henry Hub natural gas swap*," which was one of "*a thousand products*

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[60] Intercontinental Exchange Voices Support for CFTC, PWG Recommendations on Regulation of OTC Markets, ICE (Oct. 24, 2007), *available at* http://files.shareholder.com/downloads/ICE/0x0x139263/0a11dc59-87d3-4c36-8e61-9c3e41e95836/ICE_News_2007_10_24_General_Releases.pdf. (emphasis added.)

[61] Platts Inside FERC, *supra* note 8 (emphasis added).

[62] *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?: Hearing Before the Subcommittee on Oversight and Investigations*, 110th Cong. 17, 22 (Dec. 12, 2007) (statement of Charles A. Vice) (emphasis added).

that trade on our platform."[63] Needless to say, taking its lead from this limited ICE acknowledgement, Mr. Lukken soon thereafter made clear to Congress that only ICE"s Henry Hub contract would fall under the Farm Bill amendment's auspices.[64]

In sum, notwithstanding the largely undocumented protestations of the PSI staff, there can be little doubt of ICE's quite substantial input into the CFTC crafting of that agency's proposal that ultimately became substantial framework for the "Close the Enron Loophole" Amendment.

Conclusion

Finally, I want to emphasize that, for purposes of testifying on the issues addressed in this letter, I am acting solely in my own capacity as a professor of law as my disclosure forms have made clear. I am engaging in this debate because I sincerely believe that at least some of the incredibly high prices being paid for crude oil are crippling our economy and are completely unnecessary in that they are not being driven by market fundamentals.

In sum, I want to thank you for the opportunity you have given me to respond in writing to the PSI staff analysis. I will also forward this letter to PSI staff members.

Sincerely yours,

Michael Greenberger, J.D.
Law School Professor University of Maryland School of Law

Corrected for typographical errors – July 11, 2008

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[63] Commodity Futures Trading Commission, Public Hearing On Exempt Commercial Markets 113 (Sep. 18, 2007) (unpublished manuscript, on file with Anderson Court Reporting).
[64] *See supra* pages 2, 5, 9.

Item #	Description	Date
	CFTC Documents	
1	CFTC response to Sen. Bingaman letter requesting information	06/11/08
2	CFTC Press Release, subject: "CFTC Announces Interagency Task Force to Study Commodity Markets."	06/10/08
3	CFTC response to Energy and Commerce Questions for the Record (12-12-2007 Hearing)	May 2008
4	CFTC Press Release, subject: "CFTC Names Members of the Energy Markets Advisory Committee."	05/02/08
5	Commissioner Chilton letter to Sens. Lieberman et al	05/19/08
6	Chm. Lukken Letter to the Editor (Financial Times), subject: "CFTC Proud of its Strong Partnership with the FSA"	04/25/08
7	CFTC Letter to J. Aron & Company	10/18/91
	NYMEX/ICE Documents	
8	NYMEX Exchange Rulebook 9.26-9.34	
9	NYMEX Appendix on Position Limits	
10	NYMEX Exchange-Wide Margin Requirements	
11	NYMEX Futures Margins Overview, Presented to Senate Staff	04/09/08
12	Commitments of Traders Long Report- Crude Oil	04/29/08
13	ICE Press Release, re: "ICE Facilitates Agreement to Provide Industry's Most Comprehensive Reporting for U.S. Energy Futures Contracts."	05/29/08
14	ICE Trading Volume Statistics for Q1-Q4 2007 and Q1 2008 and Staff Prepared Summary	06/20/08
	Foreign Boards of Trade/ No-Action	
15	CFTC press release: CFTC Conditions Foreign Access on Adoption of Position Limits on London Crude Oil Contract	06/17/08
16	CFTC letter to ICE Re: Foreign Terminal No-Action Relief and the Proposed Launch of the ICE Futures WTI Futures Contract	01/31/06
17	CFTC letter to ICE Re: Amendment to No-Action Letter Issued to the International Petroleum Exchange of London (now ICE Futures Europe)	06/17/08
18	NYMEX letter to CFTC Re: Boards of trade Located Outside of the United States	08/01/06

19	CFTC Letter 99-69- Request for No-Action Relief from Contract Market Designation Requirement	11/12/99
20	Foreign Boards of Trade Policy Statement	11/02/06
21	Dubai Mercantile Exchange no-action letter request	May 24, 2007
Reports		
22	California Public Employees' Retirement System Statement of Investment Policy for the Inflation-linked Asset Class	02/19/08
23	Financial Energy Markets & the Bubble in Energy Prices- Energy Security Analysis	March 2007
24	Congressional Research Service report by Mark Jickling, subject: "Regulation of Energy Derivatives."	03/19/08
25	Citi Futures Perspective- Energy Market Analysis by Tim Evans	05/12/08
26	Bank for International Settlement: Monetary & Economic Dept - OTC Derivatives Market Activity in the Second Half of 2007	May 2008
27	Goldman Sachs- "$100 Oil Reality, part 2: Has the Super-Spike End Game Begun?"	05/05/08
28	PFC Energy presentation by Roger Diwan, "Crude Oil: Non Commercial Trends and Financial Market Dynamics."	April 2008
29	Lehman Brothers- "Oil Dot-com"	05/29/08
News Articles		
30	Barron's article by Gene Epstein, subject: "Commodities: Who's Behind the Boom?"	03/31/08
31	Wall Street Journal Article, subject: "NYMEX Director Found Guilty of Illegal Natural Gas Trading."	04/09/08
32	Financial Times article by Jeremy Grant, subject: "US Watchdog Rebukes FSA on Derivatives."	04/22/08
33	Seeking Alpha article, subject: "IMF: Speculation Playing 'Significant Role' in Oil Price Surge."	05/14/08
34	Wall Street Journal Article by Neil King, Jr., subject: "Saudi Arabia's Leverage in Oil Market is Sapped."	06/16/08
Committee Correspondence		
35	Dingell/Stupak letter to Walter Lukken	06/17/08
Additional Information		
36	Multiple Associations letter to House and Senate Leadership re: distored energy commodities market.	06/11/08
37	International Monetary Fund Regional Economic Outlook: Middle East and Central Asia.	05/01/08
38	Charts for Hearing	
39	NPR commentary by Robert Reich, subject: "Stop Enabling the Speculators."	06/18/08

40	Joint Trades Letter to Members of Congress regarding energy speculation	06/18/08
41	Energy Information Administration updated report of the refinery and diesel situation	06/20/08
42	CFTC Response to Dingell/Stupak June 17, 2008 Letter	06/20/08
43	CFTC and FSA Side by Side Comparison- prepared by CFTC staff	06/20/08
44	ISDA et al letter to Members of Congress	06/18/08
45	Credit Suisse Critique of Michael Masters Testimony	June 2008
46	"ICE restrictions cold comfort for FSA" Financial Times	06/20/08
47	Philip K. Verleger, Jr. testimony before the Permanent Subcommittee on Investigation	12/11/07
48	"Southwest Airlines gains advantage by hedging on long-term oil contracts" International Herald Tribune	11/28/07
49	"Fuel Prices Hurt Delta, but Hedge Lifts Southwest" Associated Press	01/24/08
50	"Southwest Airlines reaps benefits of fuel hedging strategy" Newsday.com	05/30/08

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June 11, 2008

The Honorable Jeff Bingaman
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

Dear Senator Bingaman:

Thank you for your May 27, 2008 letter requesting information from the Commodity Futures Trading Commission (CFTC or Commission) concerning crude oil trading and related regulatory issues. I appreciated meeting with you on Monday to discuss these important matters in person and certainly share your concerns that these markets must function properly and transparently for all Americans without manipulation and fraud.

As you mentioned in your May 27 letter, recent substantial increases in the price of crude oil and other commodities have put considerable strain on American families, farmers, and businesses. These issues are a matter of intense focus at the Commission, due to the key role that futures markets play in the price discovery process. Please be assured that the CFTC is committed to ensuring that our nation's futures markets operate fairly and efficiently, and that commodity prices are determined by the fundamental forces of supply and demand, rather than by abusive or manipulative practices.

Just last week, the CFTC announced its national crude oil investigation and several other important energy initiatives, including a new agreement with the U.K. Financial Services Authority to expand the data received from institutions trading crude oil products across borders. The CFTC also announced that it will use its authorities to demand more detailed data from energy market participants on the amount of index money coming into the markets and to examine whether these funds are properly classified for regulatory and reporting purposes. These initiatives are critical, and we are working hard to implement all of them expeditiously.

Yesterday, the CFTC also announced the formation of a CFTC-led interagency task force to evaluate developments in commodity markets. The task force – which includes staff representatives from the CFTC, Federal Reserve, Department of the Treasury, Securities and Exchange Commission, Department of Energy, and Department of Agriculture – will examine investor practices, fundamental supply and demand factors, and the role of speculators and index traders in the commodity markets. It is intended to bring together the best and brightest minds in government to aid public and regulatory understanding of the forces that are affecting the functioning of these markets, and it will strive to complete its work quickly and make public its results.

The Commission shares your concerns about the need for the utmost transparency and integrity in the energy futures markets, and we are devoting all available agency resources to fulfilling our mandate to protect and ensure the integrity of the commodity futures and options markets. Our dedicated staff works tirelessly each day to pursue this important mission, and we have a history of taking strong enforcement actions to punish market manipulation and fraud.

Congress and the Commission share the same goal of protecting American consumers and ensuring the integrity of our futures markets. The Commission will continue to work with Congress as we strive to improve our regulation and oversight. To that end, please find attached a set of detailed responses to the questions you posed in your May 27 letter. Please do not hesitate to contact us if we can be of further assistance, and thank you for your leadership and ongoing attention to these important issues.

Sincerely,

Walt L. Lukken

Walt Lukken

Off Shore Oil Trading

I understand that the CFTC receives on a weekly basis position data from the British Financial Services Authority (FSA) related to the West Texas Intermediate (WTI) crude contract traded on the ICE Futures Europe market –except during the last week of trading for an expiring contract, when such data is received daily.

1a. Are the data received from the British FSA relative to the ICE Futures Europe WTI contract incorporated into the CFTC's weekly Commitment of Traders reports for crude oil? If not, why not? Do any legal barriers exist to doing so?

The Commitments of Traders (COT) Reports are published to provide traders in the markets and the public with a degree of transparency regarding trading on the regulated futures exchanges. The CFTC does not publish COT Reports for market surveillance or for any regulatory or supervisory purposes. COT Reports date to 1962 when the Commodity Exchange Authority, the CFTC's predecessor, took what it called "another step forward in the policy of providing the public with current and basic data on futures market operations." Moreover, the Report's trader groupings – commercial and non-commercial – are only utilized for purposes of the COT Reports. The Commission's market surveillance staff evaluates the positions of all large traders to ascertain whether they constitute a threat to orderly trading, irrespective of how the trader may be classified for the purpose of publishing the COT Report.

The ICE Futures Europe position data that the Commission receives from the U.K.'s Financial Services Authority (FSA) is not incorporated into the Commission's COT Reports. There are a number of reasons why the Commission does not incorporate ICE Futures Europe position data into its COT Report for the New York Mercantile Exchange (NYMEX) West Texas Intermediate (WTI) contract. First, COT Reports provide a breakdown of commercial/hedging versus non-commercial/speculative activity in contracts traded on a Commission-designated contract market, and does not extend to positions maintained on foreign boards of trade such as ICE Futures Europe. Second, although the CFTC receives certain position data regarding the ICE Futures Europe WTI contract in connection with its surveillance of the related NYMEX WTI contract, the British regulatory authority does not categorize position and position holders in a manner that can be incorporated into a COT Report. Finally, the inclusion of ICE Futures Europe position data into COT Reports would be inconsistent with the terms of the Memorandum of Understanding (MOU) between the CFTC and the United Kingdom's Financial Services Authority (FSA) by which the CFTC receives this data. Article Five of the CFTC-FSA MOU states that information provided to the Commission under the MOU must be used "solely for the purpose of enabling or assisting it to exercise its regulatory oversight and supervisory functions." As mentioned, since COT reports are not published for regulatory purposes, the publication of this information would violate the current conditions upon which the CFTC receives this data from the FSA.

1b. The CFTC testified before the Committee last month that "there is no evidence that positions changes by speculators precede prices changes for crude oil futures contracts." Did the data underlying this analysis include position information from ICE Futures Europe WTI contract? If not, why not? If so, what is the breakdown of "commercial" vs.

"non-commercial" positions held in ICE Futures Europe WTI contracts from the period in which the contract was launched in 2006, to the present?

The Office of the Chief Economist (OCE) analysis of position changes and price changes involved only WTI contracts traded on the NYMEX. Position data from the NYMEX is reported in the CFTC's Large Trader Reporting system (LTRS), which classifies trader positions by non-commercial and commercial categories and by sub-category within these broad groups. Data provided by ICE Futures Europe (which is analyzed by surveillance staff in the Division of Market Oversight) identifies market participants, but is not readily compatible with the categories and sub-categories that are reported in the LTRS. The ICE Futures Europe data is compatible with CFTC market surveillance activities, where market participant trading during the day can be monitored on both NYMEX and ICE Futures Europe. CFTC testimony on the relation between position changes and price changes, although based on NYMEX data alone, is premised on the fact that CFTC surveillance efforts have not uncovered evidence of traders using ICE Futures Europe to avoid reporting trades on NYMEX.

To improve our statistical test procedures, OCE is working to improve on existing data sets. A major effort is being made to enable us to conduct the tests described above using within-day trading activity and price changes. Similarly, when sufficient daily data for ICE Futures Europe positions do become available, OCE will move quickly to extend its analyses to include those data.

1c. Please quantify the volume of intraday trading in the ICE Futures Europe WTI contract since its launch in 2006, with respect to commercial versus non-commercial market participants.

The Commission receives position data regarding the ICE Futures Europe WTI contract pursuant to its MOU with FSA. Assuming that "intraday trading data" means records reflecting individual transactions throughout the trading day, the CFTC does not receive any intraday trading data from ICE Futures Europe that is broken down by commercial versus non-commercial traders. The Commission does not routinely receive this type of trading data for U.S. designated contract market (DCM) contracts either.

1d. As detailed more fully below, I am concerned that CFTC analysis performed relative to the role of "commercial" participants in commodity markets includes the activities of swap dealers – large institutional investors that appear to be classified along side physical hedgers in these markets, such as oil companies and airlines. Please quantify the share of swap dealer positions held in the ICE Futures Europe WTI contract, relative to the total share of open interest in the contract, the share of open interest for other "commercial" and "non-commercial" positions.

The U.K. FSA does not require exchanges to categorize its participants by commercial and non-commercial categories, and currently ICE Futures Europe WTI contract position data provided to the Commission pursuant to the CFTC-FSA MOU does not categorize positions in such categories. However, the CFTC recently reached an agreement with FSA to greatly enhance the data the Commission receives with regard to crude oil contracts traded on U.K. regulated exchanges.

Since 2006, the FSA has provided the CFTC weekly trader information, and daily information in the final trading week, to facilitate rigorous oversight of trading in related contracts on U.S. and U.K. derivatives exchanges – specifically, the linked WTI Crude Oil contracts traded on both NYMEX and ICE Futures Europe. On May 29th the Commission announced an agreement to expand information sharing between the CFTC and FSA. The agreement includes:

1. Immediately implementing expanded information-sharing to provide the CFTC with daily large trader positions in the U.K. WTI crude oil contract;

2. Extending trader information sharing to provide crude oil large trader position data for all contract months in the WTI contract, not just the nearby months;

3. A near-term commitment to enhance trader information to permit more detailed identification of market end users;

4. A near-term commitment to provide improved data formatting so trading information can be seamlessly integrated into the CFTC's surveillance system; and

5. In addition to the established position management program that FSA currently requires of ICE Futures Europe, ICE Futures Europe will notify the CFTC when traders exceed position accountability levels, as established by U.S. designated contract markets, for WTI crude oil contracts.

This additional information will improve the Commission's surveillance capability for these cross-border products.

1e. Please quantify the volume of intraday trading in the ICE Futures Europe WTI contract attributable to swap dealers, since the contract's launch in 2006.

Assuming that "intraday trading data" means records reflecting individual transactions, the CFTC does not receive intraday trading data from ICE Futures Europe broken down by commercial versus non-commercial traders. Again, the Commission does not receive this type of trading data for U.S. designated contract market (DCM) contracts either.

1f. Is the position-related data the CFTC receives from the FSA sufficient to assess crude-related positions of any sovereign wealth funds participating in the ICE Futures Europe market? Please quantify this investment and describe any notable trends.

The Commission's staff has not observed any positions of sovereign wealth funds in the data received to date on the ICE Futures Europe crude oil contract. This observation is consistent with that for the NYMEX crude oil future, where sovereign wealth funds have not held reportable positions in that contract. If, in the future, sovereign wealth funds were directly to hold reportable positions, they would be identified in the Commission's large trader reporting for

NYMEX as well as in the large trader information received from the FSA for the ICE Futures Europe crude oil contract.

1g. Please provide the Committee with an account of any cross-border investigation and enforcement efforts that have spanned energy trading activities on both domestic markets and Foreign Boards of Trade. To the extent that such information might be governed by existing confidentiality requirements, rest assured the Committee will make arrangements to ensure this information remains private and confidential.

In December of 2007, the Division of Enforcement (DOE) launched a nationwide crude oil investigation into practices surrounding the purchase, transportation, storage, and trading of crude oil and related derivative contracts. Although the Commission ordinarily conducts enforcement investigations on a confidential basis, the Commission took the extraordinary step of disclosing this investigation because of unprecedented market conditions. All Commission enforcement inquiries are focused on ensuring that the markets are properly policed for manipulation and abusive practices. Although not made public, DOE has contacted numerous national and transnational companies involved in the crude oil markets as part of this investigation.

Certain of DOE's enforcement actions, most notably Amaranth, have involved natural gas trading desks located in Canada. Other actions filed by the Commission concern allegations relating to the establishment of fabricated exchanges purporting to sell futures and options in a variety of products including energy.

In addition, DOE has, either on its own initiative or in response to questions, complaints, or inquiries it received, opened investigations in several additional matters with cross-border components. These discrete investigations include allegations pertaining to: manipulative conduct involving crude oil trading in November-December 2005; the false reporting of natural gas trading for a certain month that included trading by an international entity; the pricing relationships for crude oil on a foreign exchange in December 2007; an instance of alleged false reporting and attempted manipulation of storage data for crude oil in December 2006; and an unregulated managed account advisor for forex and energy futures trading.

Over the past five years, in connection with our energy related enforcement matters DOE has made or received formal requests for international assistance to or from our foreign regulatory counterparts involving trading in crude oil, natural gas, heating oil, unleaded gasoline, and propane. The types of misconduct that were the subject of these requests included allegations concerning disruptive and/or potentially manipulative conduct, trade practice abuses including wash trading, and fraud. Most of the requests made by the CFTC were directed to our counterpart regulators in Canada and the United Kingdom.

The Swap Dealer Loophole

The Commission has repeatedly testified before Congress that the role of "non-commercial" participants in crude oil markets has not significantly changed during the current period of prolonged run-up in prices. As previously mentioned, this assertion

obscures the fact that swap dealers are, for purposes of CFTC analysis, classified along side physical hedgers as "commercial" participants in these markets. I found notable the CFTC's acknowledgement in testimony before the Committee that "swap dealers now hold significantly larger positions in crude oil," and that "this development has altered the traditional role of commercial traders" in the oil markets.

1a. Please explain the policy rationale for classifying swap dealers as "commercial" market participants, along side entities that participate in these markets as physical hedgers. Is there any current legal barrier to classifying these entities as "non-commercial" market participants for reporting purposes?

On May 29, 2008, the Commission announced several initiatives to gather additional information from the energy futures markets, including information from swap dealers. The Commission is using its existing Special Call authorities to immediately begin to require traders in the energy markets to provide the agency with monthly reports of their index trading to help the CFTC further identify the amount and impact of this type of trading in the markets. In addition, the Commission will develop a proposal to routinely require more detailed information from index traders and swaps dealers in the futures markets, and review whether classification of these types of traders can be improved for regulatory and reporting purposes. Lastly, the Commission will review the trading practices for index traders in the futures markets to ensure that this type of trading activity is not adversely impacting the price discovery process, and to determine whether different practices should be employed.

Under current practices, the classification of a trader as either commercial or non-commercial for purposes of the COT Report is described on the Commission's website:

> **Commercial and Non-commercial Traders**. When an individual reportable trader is identified to the Commission, the trader is classified either as "commercial" or "non-commercial." All of a trader's reported futures positions in a commodity are classified as commercial if the trader uses futures contracts in that particular commodity for hedging as defined in CFTC Regulation 1.3(z), 17 CFR 1.3(z). A trading entity generally gets classified as a "commercial" trader by filing a statement with the Commission, on CFTC Form 40: Statement of Reporting Trader, that it is commercially "...engaged in business activities hedged by the use of the futures or option markets." To ensure that traders are classified with accuracy and consistency, Commission staff may exercise judgment in re-classifying a trader if it has additional information about the trader's use of the markets.
>
> A trader may be classified as a commercial trader in some commodities and as a non-commercial trader in other commodities. A single trading entity cannot be classified as both a commercial and non-commercial trader in the same commodity. Nonetheless, a multi-functional organization that has more than one trading entity may have each trading entity classified separately in a commodity. For example, a financial organization trading in financial futures may have a banking entity whose positions are classified as commercial and have a separate money-management entity whose positions are classified as non-commercial.

In 1991, the Commission made a policy decision that swap dealers using futures to offset the risks associated with over-the-counter (OTC) commodity swaps were entitled, under Regulation 1.3(z), to a hedge exemption from Federal limits (which apply only to certain agricultural markets). The result of that determination was to classify these traders as commercials, which is consistent with how we define that term and entirely consistent with the view that commercials are traders that are holding futures for risk management and not with a view toward the market's price direction, as opposed to non-commercials, who are primarily taking positions with a view on the direction of prices. There is no legal barrier to classifying these traders as either commercial or non-commercial, and the classification for the COT Report holds no particular sway over how we view these traders for our internal surveillance purposes. While it is true that traders and the press avidly follows the weekly COT Reports for clues to changes in market sentiment among the major groups of market users, the Commission's surveillance staff does not rely on these classifications, or a given trader's individual classification, in determining whether that trader, or a group of traders, poses a threat to the market.

1b. The CFTC has testified before the Committee that "the non-commercial share of total open interest has increase marginally from 31 percent to 37 percent over the past three years" – a figure that excludes the trading activities of swap dealers. How has swap dealers' share of total open interest grown over the past three years? How has the share of total open interest grown over the past three years when swap dealers are included in the "non-commercial" category?

The Office of the Chief Economist has been tracking the market share of open interest across each category and sub-category in our Large Trader Reporting System (LTRS). Testimony has been based on this analysis in the crude oil markets. From April 2005 to April 2008, swap dealer market share has grown from 23.5 percent to 31.7 percent of total open interest. Using this updated data (the testimony referenced in the question was based on data ending in Fall 2007), non-commercial market share grew from 34 to 36 percent of total open interest during the same period. If swap dealer open interest is included in the non-commercial category, the market share of this combined group has grown from 57.4 to 67.9 percent from April 2005 to April 2008.

It is important to note that these figures aggregate long positions and short positions, but they do not net long positions against short positions. In other words, these figures are the sum of the positions of market participants who would profit from a decline in price and the positions of those who would profit from a rise in price. Thus, these figures alone are insufficient to suggest an upward pressure on price.

1c. Please explain the rules related to "hedging exemptions," which may allow market participants to exceed position limits for trading crude oil. To what extent are swap dealers eligible for such exemptions, and how often have such exemptions been granted in crude oil since 2006? Similarly, please quantify the extent to which market participants granted hedging exemptions for trading the WTI contract on the New York Mercantile Exchange hold additional positions in the ICE Futures Europe WTI contract. (While I understand a single corporate entity may have different subsidiaries or affiliates active in each market, please provide this analysis in a manner that aggregates such positions.)

The Commission's policy has been to require exchanges, as part of their self regulatory responsibilities, to set speculative limits (or adopt position accountability provisions), subject to Commission approval or review of the respective rules. Accordingly, the Commission has not specified speculative position limits for energy commodities. Any violations of speculative limits set by a designated contract market are a violation of the Commodity Exchange Act, and the Commission has taken enforcement action to prosecute violations. The oversight principle whereby designated contract markets set speculative limits was endorsed in the Commodity Futures Modernization Act of 2000 in designated contract market Core Principle 5, which requires exchanges to set speculative limits or accountability provisions as appropriate.

NYMEX uses position accountability for its WTI crude oil contract, except for the position limits that apply during the last three days of trading. According to NYMEX staff, since 2006, NYMEX has issued a total of 117 hedging exemptions from position limits in their WTI crude oil market. Specifically, NYMEX issued 25 hedging exemptions based exclusively on bona fide hedge exposure (as defined in Commission Regulation 1.3(z)) to eleven different companies, 44 hedging exemptions based on a combination of hedge/swaps to 24 different companies, and 48 hedging exemptions based on exclusively swap exposure to 18 different companies. To receive an exemption from NYMEX's speculative limits, a trader must first file a formal application. If the request is granted, NYMEX stipulates a maximum allowable position for that trader, as there are no unlimited exemptions. In filing the application with NYMEX, the trader must supply details of the underlying commodity or swap exposure, details of the risk management structure of the firm, a summary of the trader's prior year's exposure, a list of the traders employed, and audited financial statements (or financials otherwise acceptable to NYMEX). After a review of the data submitted, NYMEX assesses the ability of the market to absorb the hedge position requested and determines if it is too big for the market to digest. NYMEX conducts an analysis to ascertain if the requested exemption could represent a position that, by size alone, could be disruptive. If the answer is "yes," the exemption at the level requested is not granted. NYMEX may then suggest a lower level that would be acceptable based upon its historical review of open interest, volume, and other data for that market. Finally, NYMEX also noted that it does not routinely get information in the hedge exemption process detailing traders' ICE Futures Europe WTI positions.

1d. Please quantify the volume of intraday trading in NYMEX WTI crude contract since 2006, with respect to commercial versus non-commercial market participants, and swap dealers.

The trade data that the Commission receives from NYMEX and other futures exchanges is not identified or classified by type of market participant. Therefore, the Commission does not have the data to answer the question. However, the Commission is currently in the process of upgrading its automated trade surveillance system (TSS). One initiative that is being pursued is requiring firms to identify account numbers on a regular basis and to integrate this information into TSS. Integration of this data into TSS will require additional financial and human resources. Once the Commission has completed this goal and is able to identify the owners of trading accounts in TSS, staff will have the necessary data to break down the volume of intraday trading in any exchange contract, by commercial versus non-commercial market participants, and by swap dealer.

Transparency Requirements and Conflicts of Interest

Since January 2007, the CFTC has published a supplemental, weekly "Commitment of Traders" report detailing positions of index traders with respect to 12 agricultural commodities. In announcing the reporting initiative, the CFTC noted that the new report would incorporate "... positions of managed funds, pension funds and other institutional investors that generally seek exposure to commodity prices as an asset class in an unleveraged and passively-managed manner," along with the "positions of entities whose trading predominantly reflects hedging of over-the-counter (OTC) transactions involving commodity indices -- for example, swap dealers holding long futures positions to hedge short OTC commodity index exposure opposite institutional traders such as pension funds."

1a. Why has the CFTC failed to take similar steps to increase transparency with respect to energy commodities through publication of a supplemental Commitment of Traders report – particularly with respect to crude oil?

In 2006, when the Commission determined to publish a COT Supplemental Report reflecting the aggregate futures and option positions of non-commercial, commercial, and index traders in various agricultural commodities, it also closely studied whether it would be feasible to publish similar data for energy and metals markets. At that time, the Commission found that there would be significant problems accurately classifying commodity index trading activity in energy and metals futures markets and concluded that a similar supplemental report for such trading would be potentially misleading and would not enhance market transparency.

The Commission's conclusion was based on an evaluation of the large trader data available to the Commission, and in particular on an assessment of the accuracy with which this data could be parsed out, for firms engaged in commodity index trading, between such index trading and other unrelated trading activity. In the case of energy and metals markets, there are alternative U.S. and non-U.S. exchanges and a multitude of OTC markets and derivatives products. Many swap dealers, for instance, in addition to their commodity index-related OTC activity, enter into other OTC derivatives transactions in individual commodities, both with commercial firms hedging price risk and with speculators taking on price risk. In addition, some swap dealers are very actively engaged in commercial activity in the underlying cash market, such as a physical merchandising or dealing activity. As a result of these other activities, the overall futures positions held by these energy and metals traders in CFTC-regulated markets do not necessarily correspond closely with their hedging of OTC commodity index transactions. Indeed, placing the futures positions of such swap dealers in an index trader category in a supplemental report would not accurately reflect commodity index trading activity for energy and metals markets.

Notably, the Commission is continuing to evaluate steps that it can take to improve transparency for energy markets index trading activity and it announced on May 29th that it would be using its existing special call authorities to immediately begin to require traders in the energy markets to provide the agency with monthly reports of their index trading to help the CFTC further identify the amount and impact of this type of trading in the markets. Based upon this information, the Commission plans to develop a proposal to routinely require more detailed information from index traders and swaps dealers in the futures markets, and to review whether classification of these types of traders can be improved.

1b. Please describe any technical or legal barriers to including in any such supplemental Commitment of Traders report data relative to positions in the ICE Futures Europe WTI contract.

As indicated above, the Commission believes that the CFTC-FSA MOU does not permit the use of ICE Futures Europe WTI position data for COT reporting purposes. As noted earlier, COT reports are primarily used by traders and those in the public looking to discern trends in the markets, but it is not utilized by the CFTC for regulatory purposes.

2. Testimony and various press accounts have recently noted the acquisition of petroleum storage capacity on the part of institutional investors active in energy commodity trading markets. Such trends lead to concerns regarding potential market manipulation strategies. We note that current CFTC regulations (17 CFR Part 19) require that, with respect to certain agricultural commodity markets, entities that exceed speculative position limits must file reports with the Commission outlining their underlying cash positions. Do any such similar reporting requirements apply with respect to energy commodities? If not, why not?

Nothing similar applies to energy markets because the purpose of the Part 19 reports is to assist the Commission in monitoring compliance with Federal speculative position limits. The CFTC does not set Federal speculative limits for energy commodities. However, core principle 5 for designated contract markets requires NYMEX to monitor compliance with its position limit and accountability rules, as described in the answer to 1c above.

3. Do any conflict-of-interest or insider trading-related regulations apply specifically to commodity market analysts or firms, analogous to those put in place with respect to securities as a result of the Sarbanes-Oxley Act of 2002 (P.L. 107-204)? If so, please describe such regulations – particularly as they apply to commodity market analysts and/or traders employed by investment banks with active proprietary trading operations.

Insofar as CFTC registrants are covered by the Sarbanes-Oxley Act of 2002, they are fully subject to that law's requirements with respect to securities. And securities law insider trading prohibitions apply to trading in security futures products, which are treated as both securities and futures under the Commodity Futures Modernization Act of 2000.

Unlike securities laws, though, the Commodity Exchange Act generally does not subject commodity traders to an affirmative obligation to disclose nonpublic information that may be material to the pricing of a transaction or, in the absence of such disclosure, to abstain from trading. This distinction in the law reflects the fundamental differences between securities and futures markets. The securities markets exist for capital formation purposes, and issuers and corporate insiders have information advantages over investors in publicly-traded securities. The futures markets, by contrast, are risk-shifting markets, and market participants generally have equality of access to information about publicly-traded commodities. Hedging, a principal reason that futures markets exist, itself may be considered a form of insider trading insofar as the hedger takes a position in the futures market to hedge a price risk incident to an undisclosed past or future transaction.

Accordingly, the insider trading prohibitions of the Commodity Exchange Act apply only to employees, members of the governing board, and members of any committee of a registered entity (*e.g.*, an exchange or clearing organization) or registered futures association (*i.e.*, National Futures Association). Such persons are prohibited from trading for their own account, or for or on behalf of any other person, in futures or options on futures based on material nonpublic information obtained through special access related to the performance of their duties, and from disclosing such information for any purpose inconsistent with the performance of their official duties (and from trading based on material nonpublic information that they know was obtained in violation of these prohibitions). Violation of these prohibitions is a felony punishable by fine and/or imprisonment. *See* 7 U.S.C. § 13(e) (formerly 7 U.S.C. § 13(f), recently renumbered by the CFTC Reauthorization Act of 2008). CFTC Rule 1.59, 17 C.F.R. § 1.59, contains the same prohibitions.

Home > News Room > General Press Releases > 2008

Release: 5508-08
For Release: June 10, 2008

CFTC Announces Interagency Task Force to Study Commodity Markets

Washington, DC – In light of the recent rise in crude oil and other commodity prices and the influx of new investors into commodity futures markets, the Commodity Futures Trading Commission (CFTC) is announcing the formation of an interagency task force to evaluate developments in commodity markets. The task force – which includes staff representatives from the CFTC, the Federal Reserve, the Department of the Treasury, the Securities and Exchange Commission, the Department of Energy, and the Department of Agriculture – will examine investor practices, fundamental supply and demand factors, and study the role of speculators and index traders in the commodity markets.

High commodity prices are posing a significant strain on U.S. households and the announced Interagency Task Force will aid public and regulatory understanding of the forces that are affecting the functioning of these markets. The Interagency Task Force will strive to complete its work as expeditiously as possible, and will make public the results.

Last Updated: June 10, 2008

Energy and Commerce QFRs

1. What are the CFTC's views on the potential for CFTC regulation of Financial Transmission Rights traded on Independent System Operators? Could these contracts for electricity transmission potentially fall under CFTC jurisdiction?

The CFTC does not have regulatory authority over cash or forward commodity transactions and the sale and marketing of such commodities. The Commission's regulatory jurisdiction is determined by whether a given transaction is a contract of sale of a commodity for future delivery (commonly known as a futures contract), which primarily serves to manage price risk in a commodity.

Determining whether any given transaction constitutes a contract of sale of a commodity for future delivery is governed by a body of case law and administrative actions on the subject matter applied to the particular facts and circumstances surrounding such transactions. If the relevant facts and circumstances demonstrate that given agreements constitute "... transactions involving contracts of sale of a commodity for future delivery, traded or executed on a [designated contract market] ... or any other board of trade, exchange or market ..." then, pursuant to Section 2(a)(1)(A) of the Commodity Exchange Act (CEA), the transactions would be subject to the CFTC's exclusive jurisdiction on a contract by contract basis.

In the absence of the facts and circumstances under which Financial Transmission Rights (FTRs) are currently being traded, it is difficult to answer the question with more specificity. Nevertheless, it is clear that the CFTC does not have regulatory authority over cash or forward commodity transactions that are commonly associated with the physical sale and marketing of such commodities, including physical energy transactions that fall into this category.

2. Why has the CFTC intervened in two separate lawsuits to which it is not a party, to challenge the Federal Energy Regulatory Commission's (FERC) authority to assert its anti-manipulation authority with respect to Amaranth? Is CFTC escalating its disagreement with FERC from merely providing a position to a judge where it was already a party, as it did in the matter of CFTC v. Amaranth et al. in the Southern District of New York?

The CEA provides in Section 2(a)(1)(A) that the CFTC shall have exclusive jurisdiction with respect to futures trading on a designated contract market such as the New York Mercantile Exchange (NYMEX). An unbroken line of federal court decisions dating from the mid-1970s holds that this grant of exclusive jurisdiction to the CFTC bars other federal regulatory agencies from exercising jurisdiction over this activity.

In July 2007, the CFTC brought an enforcement action against Amaranth in the U.S. District Court for the Southern District of New York alleging that Amaranth had attempted to manipulate the settlement price of the NYMEX natural gas futures contract in 2006 through a pattern of unlawful trading on the NYMEX. Also in July 2007, the FERC filed an administrative enforcement action similarly alleging that Amaranth had manipulated the settlement price of the NYMEX natural gas futures contract in 2006 through unlawful trading activity on the NYMEX. The FERC alleges that Amaranth's futures trading had downstream effects on physical natural gas prices and thereby violated the Natural Gas Act (NGA), as amended by the Energy Policy Act of 2005. The FERC has asserted that the alleged manipulative trading activity on NYMEX does not fall within the scope of the CFTC's exclusive jurisdiction under the CEA and, further, that the Energy Policy Act of 2005 implicitly limits the CFTC's exclusive jurisdiction with respect to futures trading that is alleged to have affected physical natural gas prices.

The CFTC disagrees with the FERC's interpretation of the CEA, and does not believe that the Energy Policy Act of 2005 lessened the scope of its exclusive jurisdiction under the CEA. Because the FERC has charged the Amaranth respondents with engaging in an unlawful pattern of futures trading on a designated contract market, the CFTC believes that the FERC action conflicts with the exclusive jurisdiction provision in the CEA. Equally important, the CFTC believes that the FERC action conflicts with the fundamental policy objective underlying Congress's grant of exclusive jurisdiction to the CFTC: avoiding inconsistent standards governing trading on U.S. futures exchanges. This is of critical importance to the continued expansion of the futures markets, which have witnessed dramatic growth since 2000.

The respondents in the FERC administrative action have challenged the agency's authority to prosecute the case in three different forums. First, in July 2007, respondent Brian Hunter filed an action in the U.S. District Court for the District of Columbia seeking declaratory and injunctive relief to block the FERC action. The district court denied Hunter's motion for a temporary restraining order on July 24, 2007 and denied his motion for a preliminary injunction on December 10, 2007. In neither of these rulings did the court reach the exclusive jurisdiction issue. The CFTC has not sought to participate in the Hunter case.

Second, on August 16, 2007, Amaranth filed a motion challenging the FERC's authority to prosecute its case by seeking injunctive relief in the case filed by the CFTC against Amaranth in New York. The presiding judge ordered briefing on Amaranth's motion, making clear on the record that he expected the CFTC to address the exclusive jurisdiction question in its brief. In response to the court's directive, the CFTC on September 28, 2007 filed a brief opposing Amaranth's request for a preliminary injunction and setting out the CFTC's position regarding the scope of its exclusive jurisdiction over futures trading on designated contract markets. On November 1, 2007, the court denied Amaranth's request for a preliminary injunction without reaching the exclusive jurisdiction issue.

Finally, various respondents in the FERC case requested reconsideration of the agency's decision to file charges in the case, asserting that the CEA vests in the CFTC exclusive jurisdiction over futures trading on the NYMEX. On November 30, 2007, the FERC issued an adjudicatory Order that denied those reconsideration requests and for the first time spelled out its theory for asserting jurisdiction over futures trading on a designated contract market.

Various respondents petitioned for review of the FERC's November 30, 2007 Order in the U.S. Court of Appeals for the District of Columbia Circuit. Because the FERC has now issued a formal Order taking a position on the scope of the CFTC's exclusive jurisdiction under the CEA that directly conflicts with the CFTC's views on that issue, the CFTC concluded that full participation in the appeal as an intervenor was both necessary and warranted. As the agency charged with administering the CEA for the past 34 years, it is incumbent on the CFTC to provide the D.C. Circuit with its views regarding the important questions presented in this appeal.

In opposing Amaranth's motion in the New York case, the CFTC's brief argued that "FERC should be permitted to determine in the first instance the scope of its new anti-manipulation authority under [the Energy Policy Act of 2005] in light of the pre-existing statutory grant of exclusive jurisdiction over futures trading to the CFTC in the CEA . . . If FERC's determination is adverse to the respondents in that action . . . they will have an opportunity to petition for review of that decision by the U.S. Court of Appeals for the District of Columbia." That is what has now occurred.

Accordingly, the CFTC's request to intervene in the D.C. Circuit case – which is the first instance in which we have sought to intervene in any matter involving Amaranth – does not represent an escalation of our legal disagreement with the FERC. Rather, it is a response to FERC's position on the scope of the CFTC's exclusive jurisdiction, as spelled out in the November 30, 2007 Order. Further, as Chairman Kelliher testified before the Subcommittee on December 12, 2007, the "respectful disagreement" between the CFTC and the FERC over this legal issue is "best resolved by the courts." *[Source: December 12, 2007 House Energy and Commerce Subcommittee on Oversight and Investigations Hearing, "Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?"]* The CFTC agrees with Chairman Kelliher that this question should appropriately be decided by the courts, and we believe that the courts should hear fully from both of the interested agencies.

3. Would the CFTC support or oppose legislation that would eliminate no action letters and require electronic exchanges to register with the CFTC as designated contract markets if they are trading on a Foreign Board of Trade through terminals in the U.S. for commodities that are designated for delivery in the U.S. (such as West Texas Intermediate Crude for Cushing, OK delivery)?

In 2006, the CFTC carefully examined this issue in its review of our foreign board of trade (FBOT) policy. At that time, the CFTC concluded that it would be problematic to have a requirement that FBOTs register with the CFTC as designated contract markets if their members used U.S. terminals to trade commodities that are subject to U.S. delivery.

The CFTC found that the best way to handle the issue was to continue its no-action approach, a response that reflects the internationally accepted "deference to home regulator" approach used by regulators in many developed market jurisdictions to govern access to foreign electronic exchanges by persons located in their jurisdictions. This approach generally is based upon a review of, and ongoing reliance upon, the foreign market's "home" regulatory regime, and is designed to maintain a threshold level of regulatory protections while avoiding the imposition of duplicative regulation.[1]

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[1] See, e.g., United Kingdom Financial Services Authority, Financial Services Handbook, Recognised Overseas Investment Exchanges (ROIE), Section 6; Australian Securities and Investments Commission, Policy Statement 177.8 describing alternative licensing for overseas markets; Ontario Securities Commission Staff Notice 21-702, Regulatory Approach for Foreign-Based Stock Exchanges; and Autorite des marches financiers (Quebec), Policy Statement Respecting the Authorization of Foreign-Based Exchanges. The German Bundesanstalt für

The CFTC has followed the no-action approach since 1996 and it has never experienced any market integrity or customer protection problems. The CFTC held an FBOT hearing in June 2006, including a related open public comment opportunity, during which market users, foreign exchanges and even competitive domestic exchanges overwhelmingly confirmed the success of the CFTC's approach in terms of market and customer protection and access to additional products. Subsequently, the CFTC issued a Statement of Policy re-affirming the use of the FBOT no-action process, but also enhancing it through support of information-sharing conditions where no-action relief is sought for FBOT contracts that could adversely affect the pricing of contracts traded either on a designated contract market or on any cash market for commodities subject to the CEA.

Requiring designation rather than issuing no-action letters may trigger responsive regulation by foreign jurisdictions that could lead to the imposition of greater regulatory costs on U.S. futures exchanges, such as full registration in those foreign jurisdictions. Since U.S. exchanges generally operate in multiple foreign jurisdictions, they could become subject to a wide variety of different, and possibly conflicting, regulatory requirements in every jurisdiction in which their trading systems are made available.

Even if foreign jurisdictions were more measured and only required full registration by U.S. futures exchanges when they listed commodities that were deliverable in those jurisdictions, it would still expose U.S. futures exchanges to greater regulation abroad. Notably, several U.S. exchanges that permit foreign access currently list futures contracts on commodities that are produced or delivered in foreign jurisdictions, including the CME, NYMEX and ICE Futures U.S.

Finally, the no-action procedure provides the CFTC with flexibility in dealing with particular foreign exchanges and different practices. Requiring designation would result in standardized requirements and conditions on FBOTs and would be less tailored to a particular foreign exchange that is already subject to regulation in its home jurisdiction.

Finanzdienstleistungsaufsicht (BAFIN) authorizes the placement of foreign terminals in Germany under Sections 37i et seq. of the German Securities Trading Act.

Home > News Room > General Press Releases > 2008

Release: 5496-08
For Release: May 2, 2008

CFTC Names Members of the Energy Markets Advisory Committee

First EMAC Meeting Scheduled for June 10

Washington, DC – Today, the Commodity Futures Trading Commission announced the members of its recently-formed Energy Markets Advisory Committee. CFTC Acting Chairman Walter L. Lukken is the Chairman of the EMAC. It is designed to provide a public forum to examine emerging issues related to the energy markets and the CFTC's role in these markets under the Commodity Exchange Act.

"In these historic times for the markets, I am pleased to have such a diverse and knowledgeable group of energy industry participants to assist the Commission in its role in policing the energy markets," said CFTC Acting Chairman Lukken.

The first EMAC meeting is scheduled for June 10, 2008 – more details will be released in the future. The 25-person committee membership includes:

Energy Markets Advisory Committee

Bob Anderson
Committee of Chief Risk Officers

Laura Campbell
Memphis Light, Gas & Water

Donald Casturo
Goldman Sachs Group, Inc.

Paul Cicio
Industrial Energy Consumers of America

Bo Collins
1.618 Group LLC

Sean Cota
Cota & Cota Oil & Propane

Kevin Fox
D.E. Shaw & Co., L.P.

John P. Heimlich
Air Transport Association

R. Skip Horvath
Natural Gas Supply Association

Brian Kelly
Colonial Energy, Inc.

Anthony Mansfield
Heller Ehrman LLP as a representative of Shell Trading (US) Company

William McCoy
Morgan Stanley

James Newsome
NYMEX, Inc.

Ron Oppenheimer
Merrill Lynch Commodities, Inc.

Paul Pantano
McDermott, Will & Emery as a representative of the Futures Industry Association

Satu Parikh
Lehman Brothers, Inc.

Robert Pickel
ISDA

Dr. Craig Pirrong
Bauer College of Business
University of Houston

Michael Prokop
Amerex Brokers LLC

Richard Sandor
Chicago Climate Exchange, Inc.

John Shelk
Electric Power Supply Association

Foster Smith
J.P. Morgan

Jeffrey Sprecher
IntercontinentalExchange, Inc.

Mark Stainton
Citadel Investment Group, L.L.C.

Don Whittaker
American Petroleum Institute

In addition to the representative members, the CFTC has invited officials from the Congressional Research Service, the Department of Energy, the Federal Energy Regulatory Commission, and the Federal Trade Commission to participate as Official Observers.

Last Updated: May 22, 2008

U.S. Commodity Futures Trading Commission
Three Lafayette Centre,1155 21st Street, NW, Washington, DC 20581
www.cftc.gov

Bart Chilton
Commissioner

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bchilton@cftc.gov

May 19, 2008

The Honorable Joseph I. Lieberman
706 Hart Senate Office Building
United States Senate
Washington, D.C. 20510-0703

The Honorable Carl Levin
269 Russell Senate Office Building
United States Senate
Washington, D.C. 20510-2202

The Honorable Susan M. Collins
461 Dirksen Senate Office Building
United States Senate
Washington, D.C. 20510-1904

The Honorable Norm Coleman
320 Hart Senate Office Building
United States Senate
Washington, D.C. 20510-2306

Dear Senators:

I write to congratulate you once again for your leadership in closing the Enron Loophole and to compliment you for your steadfast efforts to provide greater transparency to the derivatives industry. The high price of oil and other energy contracts is just one reason that your efforts are so appreciated. The continued focus on these issues, as evidenced by your hearing this week, will prove critically important to American consumers and businesses.

I fully support your efforts to review the role of speculative trading in commodity markets in the United States, and believe that this review should not be limited to on-exchange activities of index traders and hedge funds. There are many commodity transactions, as you know, that may be off the radar screen of the Commodity Futures Trading Commission.

Furthermore, I support a review of the effects of trading—in all months—look-alike contracts executed on foreign boards of trade (like the WTI crude oil contract traded in both London and New York). It is my hope that a determination can be made about any improper aggregate speculation in these look-alike contracts executed through foreign terminals located in the U.S.

Finally, I am supportive of an examination of sovereign wealth funds (SWFs) that are investing in our derivatives markets. Specifically, I am concerned about SWF investment, either directly or indirectly, in strategic commodity markets that are not based solely on commercial or investment grounds. Certainly, we should be cautious about any SWF investments that are motivated by inappropriate objectives of the controlling government. I am interested, for example, in any available SWF disclosure information related to asset allocation in the derivatives sector.

Ensuring greater transparency to America's risk management and price discovery markets is critically important. Thank you again for your leadership, I look forward to working with you on these and other matters of mutual interest.

Sincerely,

Bart Chilton
Commissioner

Miller, Richard

From: Becker-Dippmann, Angela (Energy) [Angela_Becker-Dippmann@energy.senate.gov]
Sent: Wednesday, April 30, 2008 9:42 AM
To: Miller, Richard
Subject: FW: CFTC Proud of Its Strong Partnership with the FSA [FT/Letter to the Editor by Acting Chairman Lukken]

Subject: CFTC Proud of Its Strong Partnership with the FSA [FT/Letter to the Editor by Acting Chairman Lukken]

CFTC Proud of Its Strong Partnership with the FSA

Financial Times - April 25 2008 03:00

Letter to the Editor

From Mr Walt Lukken.

Sir, I write in response to your article "US regulator takes FSA to task over poor derivatives oversight" (April 22) to make clear my views, as head of the US Commodity Futures Trading Commission, of the working relationship this agency has with our sister regulator, the Financial Services Authority.

The FSA is one of our most important foreign partners in regulating the global marketplace, particularly given our similar principles-based regulatory structures and our oversight responsibilities on linked crude oil products. In fact, our agencies signed a ground-breaking memorandum of understanding on market surveillance 18 months ago that has allowed greater co-ordination of surveillance and information-sharing between the two organisations. This is unprecedented among foreign regulators and should serve as an example for others seeking to create borderless oversight.

The key to this regulatory co-operation is "mutual recognition" for foreign jurisdictions, which allows home country regulators to take the oversight lead over its markets with close information-sharing between regulators. The CFTC adopted this concept 20 years ago with the UK being one of the first jurisdictions to be recognised.

Those who suggest regulators must require foreign authorities to mirror home country regulation to be effective are missing the point about the outcome-driven mutual recognition process. The goal is to protect the markets, its participants and the public - not to dictate the specific means for meeting that end. I am confident that our partnership with the FSA is achieving this important public goal.

This is not only my view, but that of the International Monetary Fund and World Bank, which conducted an 18-month review of the UK's financial regulatory system in 2003 and found its regulatory framework to be at the "forefront internationally".

In this global economy we must rely on the expertise of other regulators around the world to protect the marketplace, and I am proud to have the FSA as a strong partner on that front.

Walt Lukken,
Acting Chairman,
Commodity Futures Trading Commission,
Washington, DC 20581, US

UNITED STATES OF AMERICA
COMMODITY FUTURES TRADING COMMISSION
2033 K Street, N.W.
Washington, D.C. 20581

October 18, 1991

Ms. Laurie R. Ferber
General Counsel
J. Aron & Company
85 Broad Street
New York, NY 10004

Dear Ms. Ferber:

By filing dated June 28, 1991, pursuant to Commodity Futures Trading Commission (Commission) Rule 1.47, J. Aron & Company ("Aron") requested that the Commission recognize as bona fide hedging the transactions and positions in the Chicago Board of Trade's wheat, corn and soybean futures contract markets taken by Aron as an offset of price risks resulting from swap activity related to the Goldman Sachs Commodity Index ("GSCI"). The statement was supplemented by a filing dated July 19, 1991.

The filing states that Aron intends to engage in swap transactions in which Aron will be obligated to make payments to the counterparties based on the GSCI. Thus, Aron will effectively be short the commodity components of the GSCI. In order to offset this price risk exposure, Aron intends to establish offsetting long positions in the component futures contract markets.

The filing represents that Aron has a specific order to enter into a swap which has a notional value of $100 million. The stated exemption levels for a swap of that size (based on futures settlement prices on June 25, 1991) are 414 CBT wheat futures contracts, 75 for CBT soybean futures contracts, and 321 CBT corn futures contracts. The filing further represents that Aron anticipates entering into additional swap contracts related to the GSCI.

The Commission understands that Aron anticipates that the level of outstanding swap transactions related to the GSCI may change quickly, and that Aron will need to adjust its hedge accordingly. The Commission, therefore, agrees to accept Aron's offer to submit weekly reports showing the notional value of all outstanding swaps against which Aron will be obligated to make payments based on the GSCI, and the equivalent number of futures contracts of wheat, corn and soybeans. These reports should be submitted to the Commission's Chicago regional office on the same date that Aron files its Form 204 reports.

The maximum level of hedge exemption, therefore, will be based on the value fluctuation equivalent of all outstanding GSCI swap transactions you have entered into. No additional filing will be necessary unless there is a change in the nature (as opposed to the level) of the risk exposure or unless specifically requested by the Commission. However, an additional filing will be required if Aron wishes to exceed Commission position limits in a futures market not covered in this application or if Aron wishes to hedge swap transactions unrelated to the GSCI.

The current filing requests exemptions for both long and short positions, but only demonstrates a need for long hedge positions. The representations of a need for short hedge positions are, at this point, hypothetical and, in any event, certainly appear to fall short of the levels that have been requested based on needs for long hedge positions. Accordingly, based on the current filing, the Commission will not recognize short positions, purported to be related to GSCI swap transactions, as bona fide hedging pursuant to 1.3(z)(3). Of course, the Commission will reconsider this issue in light of any additional information that Aron may choose to provide in a future filing pursuant to 1.47.

Sincerely,

Jean A Webb

Jean A. Webb
Secretary to the Commission

9.26 All Month/Any One Month Position Accountability

(A) Any person, as defined in Rule 1.26, who owns or controls positions in excess of the levels cited in Chapter 9, Appendix (A) below, under heading 9.26 All Month/Any One Month Position Accountability shall be subject to the following provisions pursuant to position accountability levels:

(1) promptly supply to the Exchange such information as the Exchange may request pertaining to the nature and size of the position, the trading strategy employed with respect to the position, and the position owner's or controller's hedging requirements, provided, however, that if the position owner or controller fails to supply such information as and when requested, the President or his designee may order the reduction of such position;

(2) agree, upon request by the President or his designee, not to increase the position owned or controlled as of the time the request was received; and

(3) agree to comply with any prospective limit prescribed by the President or his designee which exceeds the size of the position owned or controlled.

(B) For the purposes of this Rule 9.26, the futures-equivalent of an option contract and spread option contract is the previous day's NYMEX Risk Factor for that option. Further, long calls, short puts and long futures are on the same side of the market; short calls, long puts and short futures are on the same side of the market.

With respect to crack spread option contracts, a call option is the equivalent of a long product futures contract and a short crude oil futures contract; a put option is the equivalent of a short product futures contract and a long crude oil futures contract. Therefore, long crack spread option calls and short crack spread option puts are on the same side of the market; short crack spread option calls and long crack spread option puts are on the same side of the market.

With respect to calendar spread option contracts, a call option is the equivalent of a long futures contract in the first underlying futures in the spread and a short futures contract in the second underlying futures in the spread; a put option is the equivalent of a short futures contract in the first underlying futures in the spread and a long futures contract in the second underlying futures in the spread.

(C) The any one month/all month position accountability levels shall be calculated on a net futures-equivalent basis. A NYMEX Light Sweet Crude Oil miNY Futures Contract shall be deemed equivalent to .50 of a Crude Oil Financial Contract, a NYMEX Natural Gas miNY Futures Contract shall be deemed equivalent to .25 of a Henry Hub Penultimate Financial Futures Contract, a NYMEX miNY Gasoline Futures Contract shall be deemed equivalent to .50 of a Gasoline Financial Contract, and a NYMEX miNY Heating Oil Futures Contract shall be deemed equivalent to .50 of a Heating Oil Financial Futures Contract; a COMEX miNY Gold Futures Contract shall be deemed equivalent to .50 of a Gold future, a COMEX miNY Silver Futures Contract shall be deemed equivalent to a .50 Silver future, and a COMEX miNY Copper Futures Contract shall be deemed equivalent to a .50 Copper Future.

(D) Except as provided in Rule 9.27, the any one month/all month position accountability levels for each futures contract traded on the Exchange are listed in Chapter 9, Appendix (A) below.

Note: Specific reference to contract aggregation requirements prescribed in Chapter 9, Appendix (A). Further, the Exchange may apply Accountability Compliance on a Futures Only basis to the base contracts which others "aggregate into" as per Appendix (A).

Option Contract Gross Option Quadrant Position Accountability Levels

Accountability levels for options cited in Appendix (A) are per quadrant (long call, long put, short call, short put) on a gross basis.

back to top

9.26A Any One Month and /or All Months Position Limits for Soft Commodities

(A) No person may own or control a net long position or a net short position in any one month or all months combined for soft commodities in excess of the levels set forth in Chapter 9, Appendix (A)

back to top

9.27 Expiration and Current Delivery Month Position Limits

(A) No person may own or control a net long position or a net short position in the expiration or current delivery month (as defined in this Rule 9.27 for energy, metals and soft contracts respectively) in excess of the levels set forth in Chapter 9, Appendix (A) below under 9.27 Expiration and Current Delivery Month Position Limits or Position Accountability.

Note: Specific reference to contract aggregation requirements prescribed in Chapter 9, Appendix (A).

(B) The expiration position limits for energy contracts for those contracts enumerated in Appendix (A), Chapter 9 for which expiration month position limits are designated, are effective on the open of trading of the last three trading days of the futures contract. The expiration position limits shall be calculated on a net futures-equivalent basis.

(C) The expiration month position limits for the PJM and the Uranium contracts are effective on the opening of trading on all business days when a contract month becomes the first nearby month (or spot month) and continues on an intra-day basis thereafter until the conclusion of trading in the expiring contract. The expiration month position limit shall be calculated on a net futures-equivalent basis for the PJM contracts.

(D) The current delivery month position limits for physically-delivered metals contracts are effective as of the close of business on the business day prior to the first notice day for any delivery month. No person shall maintain any position which, when combined with the number of contracts for which a delivery notice has been tendered or accepted during the delivery month, exceeds the maximum permissible current delivery month position limit for such contract. The current delivery month position limits for COMEX London Metals Futures contracts shall be effective as of the open of business on the first business day of the expiring contract month.

(E) The current delivery month position limits for soft commodities shall be in effect as of the open of trading on the last three trading days of the expiring contracts.

back to top

9.27A Expiration Position Accountability Levels

(A) Any person who owns or controls positions in excess of the levels cited in Chapter 9, Appendix (A) below, under heading 9.27A Expiration Position Accountability Levels, shall be subject to the following provisions pursuant to position accountability levels:

(1) promptly supply to the Exchange such information as the Exchange may request pertaining to the nature and size of the position, the trading strategy employed with respect to the position, and the hedging requirements (if any), provided, however, that if the principal or controller fails to supply such information as and when requested, the President or his designee may order the reduction of such position;

(2) agrees, upon request by the President or his designee, not to increase the position owned or controlled as of the time the request was received;

(3) agrees to comply with any limit prescribed by the President or his designee, and to decrease any open position if directed upon review of the information cited in item 1 above.

(B) The Expiration Position Accountability Levels for energy contracts, for those contracts enumerated in Appendix (A), Chapter 9 for which expiration accountability levels are designated, are effective on the open of trading of the last three trading days of the Penultimate and Last Day cash settled futures contracts. The expiration position accountability levels shall be calculated on a net futures-equivalent basis. A NYMEX Light Sweet Crude Oil miNY Futures Contract shall be deemed equivalent to .50 of a Crude Oil Financial Contract, a NYMEX Natural Gas miNY Futures Contract shall be deemed equivalent to .25 of a Henry Hub Penultimate Financial Futures Contract, a NYMEX miNY Gasoline Futures Contract shall be deemed equivalent to .50 of a Gasoline Financial Contract, and a NYMEX miNY Heating Oil Futures Contract shall be deemed equivalent to .50 of a Heating Oil Financial Futures Contract.

(C) The Expiration Position Accountability Levels for metals contracts, for those contracts enumerated in Appendix (A), Chapter 9 for which expiration accountability levels are designated, are effective on the open of trading on the last three trading days of such contracts. The expiration position accountability levels shall be calculated on a net futures-equivalent basis. A COMEX miNY Gold Futures Contract shall be deemed equivalent to .50 of a Gold future, a COMEX miNY Silver Futures Contract shall be deemed equivalent to a .50 Silver future, and a COMEX miNY Copper Futures Contract shall be deemed equivalent to a .50 Copper Future.

(D) Trading in the underlying physically delivered contract that is the basis for the settlement prices for all contracts subject to this rule shall additionally be subject to NYMEX Interpretive Notices 01-06 and 01-07. Note: Specific reference to contract aggregation requirements prescribed in Chapter 9, Appendix (A).

back to top

9.28 Exemptions from Position Limits for Bona Fide Hedging Transactions

(A) The limits set forth in Rule 9.27 and 9.26A shall not apply to bona fide hedging transactions as defined in §1.3(z)(1) of the Regulations of the Commission (17 C.F.R. §1.3(z)(1)), as it may be amended from time to time.

(B) Notwithstanding the provisions of Subsection (A) of this Rule 9.28, any person who owns or controls a bona fide hedging position in excess of the levels set forth in Rules 9.27 and 9.26A must comply with the applicable provisions of Rules 9.29, 9.31, 9.32 and this Rule 9.28.

(C) Any person who owns or control bona fide hedge positions must initiate and liquidate positions in accordance with sound commercial practices and in an orderly manner; trading shall not be conducted in a manner calculated to cause unreasonable price fluctuations or unwarranted price changes. No person shall use hedge positions to attempt to violate or avoid the By-Laws and Rules or to impair the good name of the Exchange.

(D) Any person who received approval to own or control positions classified as bona fide hedge positions shall submit to the Exchange, upon the request of the Board, the Control Committee or the President any information required by the Board, the Control Committee or the President or his designee (collectively, the "President" for purposes of Rules 9.28-9.36).

(E) Whenever an order of the Board, of the Control Committee or of any other Committee of the Exchange excludes from the operation of the order bona fide hedge positions or transactions, any person who desires his positions or transactions to be excluded must file a Hedge Notice with the Exchange as provided in this Chapter 9.

(F) Nothing in this Chapter 9 concerning exemption from position limits or any related provision shall in any way limit (i) the authority of the Exchange to take emergency action or (ii) the authority of the President to review at any time the position owned or controlled by any person and to direct that a position be reduced to the level provided for by Rules 9.26A or 9.27.

back to top

9.29 Exemptions from Position Limits for Exposure from Commodity Swap Transactions

(A) A person may apply to the Exchange for an exemption from the position limits set forth in Rules 9.27 and 9.26A where such exemption is necessary to reduce exposure resulting from commodity swap transactions that meet all the criteria of the Commodity Futures Trading Commission (the "Commission"), as stated in the Policy Statement Concerning Swap Transactions, 54 Fed. Reg. 30694 (July 21, 1989), or the Exemption of Swap Agreements 17 C.F.R. Part 35 (Jan. 22, 1993), as it may be amended or interpreted by the Commission.

(B) Applicants for an exemption under this Rule shall apply to the President or his authorized representative (referred to as the "President"), on forms provided by the Exchange, not more than five (5) days after assuming a position in excess of position limits under this Rule.

The Application shall include: a list of the contracts for which exemption is requested; a full and complete explanation of the underlying swap exposure; an agreement to comply with the limits imposed with respect to the proposed transactions; audited financial statements or other financial statements in the form approved by the President; an agreement to comply with the By-Laws and Rules of the Exchange; an agreement to submit a supplemental statement to the Exchange explaining any material change in circumstances or information provided in the application; and agreement to initiate and liquidate positions in accordance with sound commercial practices and in an orderly manner; and such other information, and representations as may be required by the Exchange.

(C) Any person who receives approval to own or control positions pursuant to this Rule, shall provide to the Exchange, upon the request of the Board, the Control Committee, or the President, any information or documentation requested relating to the exemption, the underlying swap transactions, or the financial condition of the applicant.

(D) The President shall, on the basis of the application and supplemental information which the Exchange may request, determine whether an exemption from speculative position limits shall be granted. The President may deny, condition or impose limitations upon an exemption request, based upon the applicant's business needs, financial status and integrity, the bona fides of the underlying swap transactions, on the liquidity, depth and volume of the market for which the exemption is sought, and on such factors as the President deems appropriate. The President may review at any time exemptions granted under this Rule, and may modify, revoke or place limitations on the exemption.

(E) Nothing in this Rule shall in any way limit (i) the authority of the Exchange to take emergency action; or (ii) the authority of the President to review at any time the position owned or controlled by any person and to direct that a position be reduced to the level provided for by Rules 9.26A and/or 9.27.

(F) Any person who has received from the President written authorization to exceed position limits imposed under Rules 9.27 or 9.26A must file with the Exchange an updated application annually, no later than the anniversary date of the initial authorization, or waive the exemption.

back to top

9.29A Exemptions from Position Limits for Exposure Associated with NYMEX Physical versus Cash Settled Arbitrage Transactions

(A) A person may apply to the Exchange for an exemption from the position limits set forth in Rule 9.27 related to contracts CL, NG, HO, HU RB, GC, SI, and HG, where such exemption is in connection with open arbitrage positions in the associated Penultimate Cash-Settled Contracts (WS, HP, NP, BH, RT), miNY Contracts (QM, QG, QH, QU, QO, QI , QC), Last Day Cash-Settled Contracts (HH, NN) and Cash-Settled Penultimate Options (LC, LN, LB, LG).

(B) Applicants for an exemption under this Rule shall apply to the President or his authorized representative (referred to as the "President"), on forms provided by the Exchange, not more than two (2) days after assuming a position in excess of position limits under this Rule.

The Application shall include: a list of the contracts for which exemption is requested; an agreement to comply with the limits imposed with respect to the proposed transactions; an agreement to comply with the By-Laws and Rules of the Exchange; agreement to initiate and liquidate positions in accordance with sound commercial practices and in an orderly manner; and such other information, and representations as may be required by the Exchange.

(C) Any person who receives approval to own or control positions pursuant to this Rule shall provide to the Exchange, upon the request of the Board, the Control Committee, or the President, any information or documentation requested relating to the exemption.

(D) The President shall, on the basis of the application and supplemental information which the Exchange may request, determine whether an exemption from speculative position limits shall be granted. The President may deny, condition or impose limitations upon an exemption request based upon the applicant's business needs, financial status and integrity, the bona fides of the underlying swap transactions, on the liquidity, depth and volume of the market for which the exemption is sought, and on such factors as the President deems appropriate. The President may review at any time exemptions granted under this Rule, and may modify, revoke or place limitations on the exemption.

(E) Nothing in this Rule shall in any way limit: (i) the authority of the Exchange to take emergency action; or (ii) the authority of the President to review at any time the position owned or controlled by any person and to direct that a position be reduced to the level provided for by Rule 9.27.

(F) Any person who has received from the President written authorization to exceed position limits imposed under Rule 9.27 must file with the Exchange an updated application annually, no later than the anniversary date of the initial authorization, or waive the exemption.

back to top

9.30 Hedge Notice

(A) Any person who owns or controls a bona fide hedge position in excess of the levels set forth in Rule 9.27 must file with the Exchange a written Hedge Notice accompanied by audited financial statements or other financial statements in the form approved by the President, not more than five (5) days after assuming such a position, provided, however, that such position may not be assumed with respect to a contract expiring within three (3) business days except as authorized in advance by the President; further provided that a Hedge Notice seeking exemption from a current delivery month position limit in a metals futures contract shall be filed, and must be approved, prior to assuming a position in excess of the limit; and, further provided that the President or his designee may in special circumstances authorize the late filing of any Hedge Notice.

(B) Any Hedge Notice must, except as otherwise authorized by the President, provide the following statements and information:

(i) A representation that the transactions will be bona fide hedging transactions as defined in Regulation §1.3(z)(1) of the Commission (17 C.F.R. §1.3(z)(1)) as it may be amended from time to time;

(ii) A representation that the transactions will be necessary or advisable as an integral part of such person's business; and, in that connection, a full and complete explanation of the nature and extent of such business;

(iii) A representation that the person has complied with any applicable Federal requirement relating to hedging; and, that the person has received approval, where necessary, from the Commission;

(iv) A schedule of the maximum number of contracts, long and short, which the person will establish as a hedge;

(v) An agreement to comply with whatever limits are imposed with respect to the proposed transactions; to submit a supplemental statement explaining any change in circumstances which affect the nature of such position; and, to comply with the By-Laws and Rules; and

(vi) A statement from the person's carrying firm that the transactions will be identified as hedging transactions on the books of such firm.

(C) Any person who has received from the President or his designee written authorization to exceed position limits imposed by Rule 9.27 must file with the Exchange an updated Hedge Notice annually.

back to top

9.31 Revised Hedge Notice

Whenever the positions which a person desires to classify as a bona fide hedge exceed the limits imposed by the President or exceed the maximum number of contracts previously identified by such person in the Hedge Notice such person shall file with the Exchange, not more than five (5) days after the date on which such person has exceeded such amounts, a Revised Hedge Notice accompanied by audited financial statements or other financial statements in the form approved by the President provided, however, that such limits may not be exceeded with respect to a contract expiring within three (3) business days except as authorized in advance by the President; further provided that a Revised Hedge Notice seeking exemption from a current delivery month position limit in a metals futures contract previously identified in the Hedge Notice shall be filed, and must be approved, prior to assuming a position in excess of such limit; and, further provided that the President or his designee may in special circumstances authorize the late filing of any Hedge Notice.

back to top

9.32 Action by the Exchange

(A) The President shall determine whether the transactions or positions described in the Hedge Notice are bona fide hedging transactions or positions.

(B) The President may impose such limits on bona fide hedge transactions or positions, as in his discretion are commensurate with market conditions, the person's business needs, financial ability and integrity.

(C) The President may review, from time to time, any approvals of hedge transactions and positions; and the President may revoke, or place limitations on, any approval. Any person who is adversely affected by a determination of the President may request the Control Committee to review such determination.

(D) No Clearing Member shall maintain or clear any position which taken alone or when aggregated in accordance with the provisions of this Chapter 9 exceeds the position limits permitted under Rules 9.27 or 9.26A, except as otherwise authorized pursuant to this Chapter 9.

(E) In the event that the President learns that a Member or customer maintains positions in accounts with more than one Clearing Member, such that aggregating positions in all such accounts exceeds the position limits established by this Chapter 9, the President will notify each Clearing Member maintaining or carrying such accounts that it is in violation of Section (D) of this Rule 9.32. A Clearing Member receiving notification from the President or his designee that it is in violation of Subsection (D) of this Rule 9.32 shall reduce any above-limit position as directed by the President, provided that reduction of an aggregated position which is maintained by two or more Clearing Members shall be proportional unless otherwise directed by the President.

back to top

9.33 Position Reporting

(A) Each Clearing Member shall submit to the Exchange reports of positions equal to or in excess of the levels established by Rule 9.34. Such reports shall be submitted by no later than 8:00 A.M. in an approved machine readable format unless authorized otherwise in advance by the Director of Market Surveillance or his designee, provided however, that Clearing Members maintaining reportable positions for any contract listed on the Dubai Mercantile Exchange (DME) must submit such reports to the Exchange by no later than 12:00 A.M. (midnight).

(B) Any omnibus account or foreign broker shall submit a signed NYMEX reporting agreement in the form prescribed by the Exchange to the Exchange's Compliance Department upon becoming reportable. Any reportable omnibus account or foreign broker shall submit to the Exchange separately identifying all proprietary and customer positions equal to or in excess of the levels established by Rule 9.34. Such reports shall be submitted in the form prescribed by the Exchange by no later than 8:00 A.M. unless authorized otherwise in advance by the Senior Director of Market Surveillance or his designee, provided however, that any omnibus account or foreign broker maintaining reportable positions for any contract listed on the Dubai Mercantile Exchange (DME) must submit such reports to the Exchange by no later than 12:00 A.M. (midnight). The failure by an omnibus account or foreign broker to submit a signed NYMEX reporting agreement or properly report positions may result in a hearing by the Business Conduct Committee to limit, condition or deny access to the market.

(C) Interest in or Control of Several Accounts.

(1) If any person holds or has a financial interest in or controls more than one account, all such accounts shall be considered by the clearing member, omnibus account or foreign broker as a single account for reporting purposes.

(i) Accounts of Eligible Entities.

Accounts of Eligible Entities as defined in Rule 9.28(F) of this chapter that are traded by an independent account controller shall, together with other accounts traded by the independent account controller or in which the independent controller has an interest be considered a single account.

(ii) Accounts Controlled by Two or More Persons.

Accounts that are subject to day-to-day trading control by two or more persons shall, together with other accounts subject to control by exactly the same persons, be considered a single account.

(2) For purposes of this Rule 9.33, except for the interest of a limited partner or shareholder (other than the CPO) in a commodity pool, the term financial interest shall mean an interest of 10 percent or more in ownership or equity of an account.

(D) For purposes of sections (A), (B) and (C) above, if a person controls or holds a position equal to or greater than the number of contracts specified in Rule 9.34 long or short in any one month, then all such futures and options on such futures whether above the given level or not, shall be deemed reportable positions.

(E) All Clearing Members, omnibus accounts and foreign brokers for the purposes of sections (A), (B), (C) and (D) above, shall report to the Exchange each account in excess of the levels established in Rule 9.34 by a unique numeric designation. The unique numeric designation shall be established by filing with the Director of Market Surveillance a CFTC Form 102 meeting all the requirements of Section 17.01(b) of the Regulation of the Commission (17 C.F.R. Section 17.01(b)), as it may be amended from time to time, within one business day of when the account becomes reportable for the first time. The Clearing Member, omnibus account or foreign broker, as the case may be, shall file an updated Form 102 with the Exchange within one business day after any material change in the information supplied on the Form 102 occurs.

back to top

9.34 Reporting Levels

(A) The quantities fixed for the purposes of filing a report under Rule 9.33 are listed in Chapter 9, Appendix (A) below, under heading 9.34 Reporting Levels:

Appendix A Position limits, Accountability Levels and Reportable Levels

Appendix (A), Chapter 9

Contract Name	Rule Chapter	Commodity Code	All Month Account-ability Level Rule 9.26	Any One Month Account-ability Level Rule 9.26	Any/All Month Limit 9.26A	Expiration Month Limit Rule 9.27	Expiration Accountability Level Penultimate and Metals Contracts* Rule 9.27A	Expiration Accountability Level Last Day Contracts* Rule 9.27A	Reporting Level Rule 9.34	Aggregate Into (1)	Aggregate Into (2)
Petroleum											
USA											
EIA On-Highway Retail Diesel Swap Contract	530	HI	7,000	5,000		1,000			25	HI	
Chicago											
Chicago Ethanol (Platts) Swap	582	CU	7,000	7,000		1,000			25	CU	
Gulf Coast											
LLS (Platts) Calendar Swap	834	XL	20,000	20 000		3,000			350	XL	
LLS (Platts) Trade Month Swap	835	XT	20,000	20,000		3,000			350	XT	
LLS (Platts) vs. WTI Spread Calendar Swap	836	WH	20 000/20,000	20,000/10.000		3,000/3,000			350	XL	CL
LLS (Platts) vs. WTI Spread Trade Month Swap	837	WI	20.000/20,000	20,000/10.000		3,000/3.000			350	XT	CL
LLS (Argus) Calendar Swap	838	XA	20,000	20,000		3,000			350	XA	
LLS (Argus) Trade Month Swap	839	LI	20,000	20,000		3.000			350	LI	
LLS (Argus) vs. WTI Spread Calendar Swap	840	WJ	20.000/20.000	20,000/10,000		3,000/3,000			350	XA	CL
LLS (Argus) vs. WTI Spread Trade Month Swap	841	WK	20,000/20,000	20.000/10,000		3,000/3.000			350	LI	CL
Mars (Platts) Calendar Swap	842	MV	20,000	20.000		3.000			350	MV	
Mars (Platts) Trade Month Swap	843	MZ	20,000	20,000		3.000			350	MZ	
Mars (Platts) vs. WTI Spread Calendar Swap	844	WL	20,000/20,000	20,000/10,000		3,000/3,000			350	MV	CL
Mars (Platts) vs. WTI Spread Trade Month Swap	845	WP	20.000/20,000	20,000/10,000		3,000/3,000			350	MZ	CL
Mars (Argus) Calendar Swap	846	MX	20,000	20,000		3.000			350	MX	
Mars (Argus) Trade Month Swap	847	MO	20,000	20,000		3.000			350	MO	
Mars (Argus) vs. WTI Spread Calendar Swap	848	YX	20.000/20,000	20,000/10,000		3.000/3,000			350	MX	CL
Mars (Argus) vs. WTI Spread Trade Month Swap	849	YV	20.000/20,000	20,000/10,000		3,000/3.000			350	MO	CL
WTS (Platts) Outright Calendar Swap	850	PR	20,000	20,000		3.000			350	PR	
WTS (Platts) Trade Month Swap	851	PV	20,000	20,000		3.000			350	PV	
WTS (Platts) vs. WTI Spread Calendar Swap	852	PZ	20,000/20,000	20,000/10,000		3,000/3,000			350	PR	CL
WTS (Platts) vs. WTI Spread Trade Month Swap	853	XE	20.000/20,000	20.000/10,000		3,000/3,000			350	PV	CL
WTS (Argus) Calendar Swap	854	XB	20,000	20,000		3,000			350	XB	
WTS (Argus) Trade Month Swap	855	AY	20,000	20,000		3.000			350	AY	

WTS (Argus) vs. WTI Spread Calendar Swap	856	FF	20,000/20,000	20,000/10,000		3,000/3,000			350	XB	CL
WTS (Argus) vs. WTI Spread Trade Month Swap	857	FH	20,000/20,000	20,000/10,000		3,000/3,000			350	AY	CL
NYMEX Gulf Coast Ultra Low Sulfur Diesel (ULSD) Contract	181	LU	7,000	7,000		1,000			25	LU	
Gulf Coast Low Sulfur Diesel (LSD) Swap	737	LW	10,000	10,000		1,000			25	LW	
Gulf Coast ULSD (Argus) Calendar Swap	566	AJ	10,000	10,000		1,000			25	AJ	
ULSD Up-Down (Argus) Swap	569	JS	7,000/10,000	5,000/10,000		1,000/1,000			25	HO	AJ
Gulf Coast ULSD Crack Spread (Argus) Swap	571	CF	20,000/10,000	10,000/10,000		3,000/1,000			25	CL	AJ
Gulf Coast Ultra Low Sulfur Diesel (ULSD) Swap	738	LY	10,000	10,000		1,000			25	LY	
Gulf Coast ULSD (Platts) v. Gulf Coast Jet Spread Swap	544	VV	10,000/10,000	10,000/10,000		1,000/1,000			25	LY	GE
Gulf Coast Heating Oil Calendar Swap Contract	527	GP	10,000	10,000		1,000			25	GP	
Gulf Coast No. 6 Fuel Oil 3.0% Sulfur Swap Contract	612	MF	10,000	10,000		1,000			25	MF	
Gulf Coast 3.0% Fuel Oil BALMO Swap Contract	503	VZ	10,000	10,000		1,000			25	MF	
NYMEX Gulf Coast Gasoline Contract	180	LR	7,000	7,000		1,000			150	LR	
Gulf Coast Gasoline Calendar Swap Contract	526	GS	10,000	10,000		1,000			25	GS	
Gulf Coast Gasoline (Argus) Calendar Swap	565	AW	7,000	7,000		1,000			25	AW	
Gasoline Up-Down (Argus) Swap	568	UZ	7,000/7,000	5,000/7,000		1,000/1,000			25	RB	AW
Gulf Coast Gasoline Crack Spread (Argus) Swap	572	CK	20,000/7,000	10,000/7,000		3,000/1,000			25	CL	AW
Gulf Coast Gasoline vs. Gulf Coast Heating Oil Spread Swap Contract	607	MD	10,000/10,000	10,000/10,000		1,000 / 1,000			25	GS	GP
Gulf Coast Jet (Argus) Calendar Swap	567	AF	7,000	7,000		1,000			25	AF	
Gulf Coast Jet Fuel Calendar Swap Contract	528	GE	10,000	10,000		1,000			25	GE	
Jet Up-Down (Argus) Swap	570	JU	7,000/7,000	5,000/7,000		1,000/1,000			25	HO	AF
New York Harbor											
New York Harbor No. 2 Heating Oil	150	HO	7,000	5,000		1,000			250	HO	
Heating Oil Option Contract	320	OH	20,000	5,000		1,000			250	HO	
Heating Oil Calendar Spread Options Contract	392	FA, FB, FC, FM, FZ.	7,000	5,000		1,000			150	HO	
NYMEX New York Harbor Ultra-Low Sulfur Diesel (ULSD) Contract	151	LH	7,000	7,000		650			25	LH	
Heating Oil Financial Futures Contract	825	BH	7,000	7,000			1,000		100	BH	
New York Harbor											

Heating Oil Look-Alike Option	551	LB	7,000	7,000			1,000		100	BH	
NYMEX miNY Heating Oil Futures Contract	404	OH	7,000	7,000			1,000		250	BH	
New York Heating Oil (Platts) Swap Contract	540	YF	5,000	3,500		1,000			25	YF	
New York Heating Oil (Platts) vs. NYMEX Heating Oil Swap Contract	541	YH	7,000/5,000	5,000/3,500		1,000/1,000			25	BH	YF
RBOB vs. Heating Oil Swap Contract	558	RH	7,000/7,000	5,000/5,000		1,000/1,000			25	RB	HO
Heating Oil Arb Swap NYMEX Heating Oil v Rdam Gasoil Contract	725	HA	7,000/7,000	5,000/7,000		1,000/1,000			25	HO	GX
Heating Oil Average Price Option	321	AT	7,000	5,000		1,000			150	HO	
New York Harbor Heating Oil Calendar Swap Contract	603	MP	7,000	5,000		1,000			250	HO	
NYMEX No. 2 Up-Down Spread Calendar Swap (Platts) Contract	515	UT	10,000/7,000	10,000/5,000		1,000/1,000			25	GP	HO
Los Angeles Jet Fuel vs. New York Harbor No. 2 Heating Oil Spread Swap Contract	609	MQ	,10,000/7,000	10,000/5,000		1,000/1,000			25	MQ	HO
New York Harbor LS Diesel vs. New York Harbor No. 2 Heating Oil Spread Swap Contract	606	MK	10,000/7,000	10,000/5,000		1,000/1000			25	MK	HO
Gulf Coast Jet vs. New York Harbor No. 2 Heating Oil Spread Swap Contract	608	ME	10,000/7,000	10,000/5,000		1,000/1,000			25	GE	HO
Up- Down Gulf Coast Low Sulfur Diesel (LSD) vs. NYMEX HO Spread Swap	745	YL	10,000/10,000	10,000/5,000		1,000/1,000			25	LW	HO
Up- Down Gulf Coast ULSD vs. NYMEX HO Spread Swap	746	LT	10,000/10,000	10,000/5,000		1,000/1,000			25	LY	HO
New York Low Sulfur Diesel (LSD) Swap	739	YW	10,000	10,000		1,000			25	YW	
New York Ultra Low Sulfur Diesel (ULSD) Swap	740	YS	10,000	10,000		1,000			25	YS	
NY ULSD vs. NYMEX HO Spread Swap	564	UY	7,000/10,000	5,000/10,000		1,000/1,000			25	HO	YS
New York Harbor Gasoline Blendstock (RBOB) Futures Contract	191	RB	7,000	5,000		1,000			150	RB	
RBOB Calendar Swap	556	RL	7,000	5,000		1,000			25	RB	
RBOB Up-Down Calendar Swap Contract	557	RV	7,000/7,000	5,000/7,000		1,000/1,000			25	RB	GS
New York Harbor Gasoline Blendstock Option Contract	335	OB	20,000	5,000		1,000			150	RB	
New York Harbor Gasoline Blendstock (RBOB) Calendar Spread Option	388	ZA, ZB, ZC, ZM	7,000	5,000		1,000			150	RB	
RBOB Gasoline Financial Contract	555	RT	7,000	7,000			1,000		25	RT	
NYMEX miNY Gasoline Futures Contract	403	QU	7,000	7,000			1,000		150	RT	
New York Harbor Gasoline Blendstock "Look-Alike" Option	385	RF	7,000	7,000			1,000		150	RT	
New York Harbor Gasoline Blendstock											

(RBOB) Average Price Option	386	RA	7,000	7,000			1,000		150	RT	
New York Harbor Conv. Gasoline vs. NYMEX RBOB Gasoline Swap Contract	545	RZ	7,000/7,000	7,000/7,000		1,000/1,000			150	RT	RZ
RBOB (Platts) Calendar Swap	562	RY	7,000	7,000		1,000			150	RY	
RBOB (Platts) vs. NYMEX RBOB Spread Swap	563	RI	7,000/7,000	7,000/5,000		1,000/1,000			150	RY	RB
NYMEX New York Harbor Ethanol Contract	192	OE	1,000	750		150			25	OE	
New York Ethanol (Platts) Swap	583	EZ	7,000	7,000		1,000			25	EZ	
New York Harbor 0.3% Fuel Oil Swap Contract	542	VQ	5,000	3,500		500			25	VQ	
New York Harbor 1% v Gulf Coast 3% Fuel Oil Spread Swap	543	VR	5,000/5,000	3,500/3,500		500/500			25	MF	VR
New York Harbor Residual Fuel 1.0% Sulfur Swap Contract	614	MM	10,000	10,000		1,000			25	MM	
New York Harbor 1.0% Fuel Oil BALMO Swap Contract	502	VK	10,000	10,000		1,000			25	MM	
West Coast											
Los Angeles CARBOB Gasoline Swap	610	MH	10,000	10,000		1,000			150	MH	
Los Angeles CARBOB (OPIS) Spread Swap	573	JL	7,000/5,000	5,000/5,000		1,000/1,000			25	RB	MH
Los Angeles CARB Diesel (OPIS) Outright Swap	574	LX	5,000	5,000		1,000			25	LX	
Los Angeles CARB Diesel (OPIS) Spread Swap	575	KL	7,000/5,000	5,000/5,000		1,000/1,000			25	HO	LX
Los Angeles Jet (OPIS) Outright Swap	576	LL	5,000	5,000		1,000			25	LL	
Los Angeles Jet (OPIS) Spread Swap	577	JS	7,000/5,000	5,000/5,000		1,000/1,000			25	HO	LL
Cushing, Oklahoma											
Light "Sweet" Crude Oil Futures Contract	200	CL	20,000	10,000		3,000			350	CL	
Crude Oil Option Contract	310	LO	40,000	10,000		3,000			350	CL	
NYMEX WTI Average Price Option	341	AO	20,000	10,000		3,000			350	CL	
NYMEX WTI Calendar Swap Contract	510	CS	20,000	10,000		3,000			350	CL	
Crude Oil Calendar Spread Options Contract	390	WA, WB, WC, WM, WZ	20,000	10,000		3,000			350	CL	
Crude Oil Daily Option	833	CD	n/a	n/a		3,000			n/a	CL	
WTI Crude Oil Financial Contract	691	WS	20,000	20,000			2,000		25	WS	
WTI Crude Oil Look-Alike Option	550	LC	20,000	20,000			2,000		100	WS	
NYMEX Light Sweet Crude Oil miNY Futures Contract	401	QM	20,000	20,000			2,000		350	WS	
NYMEX Crude Oil Backwardation/Contango (B/C) Index	968	XK	20,000	10,000		2,000			150	XK	
NYMEX Crude Oil MACI Index	969	XC	20,000	10,000		2,000			150	XC	

WTI-Bow River Swap Contract	601	MA	10,000/20,000	10,000/10,000		1,000/3,000			25	MA	CL
RBOB Crack Spread Swap	559	RM	7,000/20,000	5,000/10,000		1,000/3,000			25	RB	CL
NYMEX U.S. Gulf Coast Unl 87 Crack Spread Calendar Swap (Platts) Contract	512	RU	20,000/10,000	10,000/10,000		3,000/1,000			100	CL	GS
NYMEX U.S. Gulf Coast No. 2 Crack Spread Calendar Swap (Platts) Contract	513	RD	20,000/10,000	10,000/10,000		3,000/1,000			100	CL	GP
New York Harbor Gasoline Blendstock (RBOB)-Crude Oil Spread Option	387	RX	20,000/7,000	10,000/5,000		3,000/1,000			25	CL	RB
NYMEX New York Harbor Heating Oil Crack Calendar Swap Contract	523	HK	20,000/7,000	10,000/5,000		3,000/1,000			25	CL	HO
Heating Oil–Crude Oil Spread Option Contract	350	HC	20,000/7,000	10,000/5,000		3,000/1,000			25	CL	HO
Gulf Coast No. 6 Fuel Oil Crack Swap Contract	613	MG	10,000/20,000	10,000/10,000		1,000/3,000			25	MF	CL
New York Harbor Residual Fuel Crack Swap Contract	615	ML	10,000/20,000	10,000/10,000		1,000/3,000			25	MM	CL
Gulf Coast Low Sulfur Diesel (LSD) Crack Spread Swap	741	YK	10,000/20,000	10,000/10,000		1,000/3,000			25	LW	CL
Gulf Coast Ultra Low Sulfur Diesel (ULSD) Crack Spread Swap	742	GY	10,000/20,000	10,000/10,000		1,000/3,000			25	LY	CL
New York Low Sulfur Diesel (LSD) Crack Spread Swap	743	UW	10,000/20,000	10,000/10,000		1,000/3,000			25	YW	CL
New York Ultra Low Sulfur Diesel (ULSD) Crack Spread Swap	743	YU	10,000/20,000	10,000/10,000		1,000/3,000			25	YS	CL
Europe											
Baltic											
NYMEX REBCO Futures Contract	206	RE	10,000	10,000		730			25	RE	
Northwest Europe											
Brent Financial Contract	692	BB	20,000	20,000		2,000			25	BB	
Brent Last Day Contract	698	BZ	20,000	20,000		2,000			25	BZ	
Brent American Style Option	311	OS	20,000	20,000		2,000			25	BZ	
Brent Look-Alike Option	313	BE	20,000	20,000		2,000			25	BZ	
NYMEX Brent Average Price Option	314	BA	20,000	20,000		2,000			25	BZ	
Brent Calendar Spread Options Contracts	394	AA, AB, AC, AM, AZ	20,000	20,000		2,000			25	BB	
Dated Brent Calendar Swap Futures Contract	647	UB	5,000	5,000		1,000			25	UB	
Brent (ICE) Calendar Swap Contract	696	CY	20,000	20,000		2,000			25	BZ	
WTI-Brent Crude Oil Spread Option Contract	312	BV	20,000	20,000		2,000			25	BZ	
Brent-Dubai Swap Contract	697	DB	20,000/10,000	20,000/10,000		2,000/250			25	BB	DC
WTI-Brent (ICE) Bullet Swap Contract	693	BY	20,000/20,000	10,000/20,000		3,000/2,000			25	CL	BZ

WTI-Brent (ICE) Calendar Swap	694	BK	20,000/20,000	10,000/20,000		3,000/2,000			25	CL	BZ
Dated to Frontline Brent Swap	695	FY	5,000/20,000	5,000/20,000		1,000/2,000			25	UB	BB
European Gasoil Crack Spread Swap	710	GZ	20,000/7,000	20,000/7,000		2,000/1,000			25	BB	GX
European Platts Gasoline MED Crack Spread Swap	712	EP	20,000/1,500	20,000/1,500		2,000/500			25	BB	EU
European Argus Gasoline Crack Spread Swap Contract	711	RG	20,000/7,000	20,000/7,000		2,000/1,000			25	BB	AR
European Naphtha Crack Spread Swap	713	EN	20,000/1,500	20,000/1,500		2,000/150			25	BB	UN
European Naphtha BALMO Swap Contract	501	KZ	1,500	1,500		150			25	UN	
1% Fuel Oil NWE Crack Spread Swap Contract	727	FI	20,000/1,500	20,000/1,500		2,000/150			25	BB	UF
European 1% Fuel Oil (NWE) BALMO Swap Contract	500	KX	1,500	1,500		150			25	UF	
3.5% Fuel Oil Rdam Crack Spread Swap Contract	726	FO	20,000/1,500	20,000/1,500		2,000/150			25	BB	UV
3.5% Fuel Oil FOB MED Crack Spread Swap Contract	735	FL	20,000/1,500	20,000/1,500		2,000/150			25	BB	UI
European 3.5% Fuel Oil (NWE) BALMO Swap Contract	499	KR	1,500	1,500		150			25	UV	
Brent (ICE) Calendar Swap Contract	696	CY	20,000	20,000		2,000			25	BB	
European Gasoil (ICE) Swap Contract	728	CX	7,000	7,000		1,000			25	GX	
Gasoil (ICE) Mini Calendar Swap Contract	531	CA	7,000	5,000		1,000			25	GX	
European Gasoil 0.2 CIF NWE v. Gasoil Futures Swap	715	EC	7,000/1,500	7,000/1,500		1,000/150			25	GX	UE
European Gasoil 0.2 Rdam Barges v. Gasoil Futures Swap	714	EI	7,000/1,500	7,000/1,500		1,000/150			25	GX	UG
European Gasoil 10 PPM Rdam Barges vs. Gasoil Futures Swap Contract	718	ET	7,000/5,000	7,000/5,000		1,000/500			25	GX	GT
European ULSD 50PPM CIF NWE v. Gasoil Futures Swap	719	EY	7,000/5,000	7,000/5,000		1,000/500			25	GX	ES
European Gasoil Bullet Swap Contract	561	BG	5,000	5,000			1,000		25	BG	
European Gasoil 0.2 CIF MED v. Gasoil Futures Swap Contract	716	EK	7,000/5,000	7,000/5,000		1,000/500			25	GX	GG
European Gasoil 0.2 FOB MED v. Gasoil Futures Swap Contract	717	EF	7,000/1,500	7,000/1,500		1,000/150			25	GX	UQ
European ULSD 50 PPM CIF MED v. Gasoil Futures Swap Contract	720	EE	7,000/5,000	7,000/5,000		1,000/500			25	GX	EH
European ULSD 50 PPM FOB MED v. Gasoil Futures Swap Contract	721	EO	7,000/5,000	7,000/5,000		1,000/500			25	GX	EL
Jet CIF NWE vs. Gasoil Futures Swap Contract	722	JC	7,000/1,500	7,000/1,500		1,000/150			25	GX	UJ
Jet Rdam Barges v. Gasoil Futures Swap Contract	723	JR	7,000/1,500	7,000/1,500		1,000/150			25	GX	UR

Singapore Gasoil vs. Rdam Gasoil Swap Contract	724	GA	7,000/1,500	7,000/1,500		1,000/500			25	GX	SG
Gasoil 0.1 Cargoes FOB NWE Swap Contract	534	WR	1,000	500		150			25	WR	
Gasoil 0.1 Cargoes FOB NWE v. ICE Gasoil Swap Contract	535	WT	7,000/1,000	5,000/500		1,000/150			25	GX	WR
Gasoil 0.1 Cargoes CIF NWE Swap Contract	536	TW	1,000	500		150			25	TW	
Gasoil 0.1 Cargoes CIF NWE v.ICE Gasoil Swap Contract	537	TU	7,000/1,000	5,000/500		1,000/150			25	GX	TW
Gasoil 0.1 FOB Rdam Barges Swap Contract	532	VL	1,000	500		150			25	VL	
Gasoil 0.1 Rdam Barges v. ICE Gasoil Swap Contract	533	WQ	7,000/1,000	5,000/500		1,000/150			25	GX	VL
European Gasoil 0.2 NWE (Northwest Europe) Calendar Swap Contract	654	UE	1,500	1,500		150			25	UE	
European Gasoil 0.2 Rotterdam Calendar Swap Contract	653	UG	1,500	1,500		150			25	UG	
Gasoil 10ppm Cargoes CIF NWE Swap Contract	538	TY	1,000	500		150			25	TY	
Gasoil 10ppm Cargoes CIF NWE v. ICE Gasoil Swap Contract	539	TP	7,000/1,000	5,000/500		1,000/150			25	GX	TY
European Gasoil 10 PPM Rdam Barges Swap Contract	730	GT	5,000	5,000		500			25	GT	
European ULSD 50PPM CIF NWE Swap Contract	731	ES	5,000	5,000		500			25	ES	
European ULSD Diesel NWE (Northwest Europe) Calendar Swap Contract	657	UL	1,500	1,500		150			25	UL	
European ULSD Diesel Rotterdam Calendar Swap Contract	656	UP	1,500	1,500		150			25	UP	
Northwest Europe Gasoline (Argus) Swap Contract	664	AR	1,500	1,500		500			25	AR	
European Naphtha Calendar Swap Contract	650	UN	1,500	1,500		150			25	UN	
European 1% Fuel Oil NWE (Northwest Europe) Calendar Swap Contract	658	UF	1,500	1,500		150			25	UF	
European 1% Fuel Oil Rotterdam Calendar Swap Contract	659	UH	1,500	1,500		150			25	UH	
Northwest Europe High-Low Fuel Oil Spread Swap Contract	665	FS	1,500/1,500	1,500/1,500		150/150			25	UF	UV
European 3.5% Fuel Oil Rotterdam Calendar Swap Contract	660	UV	1,500	1,500		150			25	UV	
3.5% Fuel Oil Rdam v. 3.5% FOB MED Spread Swap	734	FK	1,500/1,500	1,500/1,500		150/150			25	UV	UI
East-West Fuel Oil Spread Swap Contract	666	EW	1,500/1,500	1,500/1,500		150/150			25	UA	UV
European Jet Kerosene											

NWE (Northwest Europe) Calendar Swap Contract	651	UJ	1.500	1,500		150			25	UJ	
European Jet Kerosene Rotterdam Calendar Swap Contract	652	UR	1 500	1,500		150			25	JR	
European Propane CIF ARA (Argus) Swap	578	PS	300	300		50			25	PS	
Mediterranean											
European Gasoil 0.2 MED (Mediterranean) Calendar Swap Contract	655	UQ	1 500	1,500		150			25	UQ	
European Gasoil 0.2 CIF MED Swap Contract	729	GG	5.000	5,000		500			25	GG	
European ULSD 50 PPM CIF MED Swap Contract	732	EH	5.000	5,000		500			25	EH	
European ULSD 50 PPM FOB MED Swap Contract	733	EL	5,000	5.000		500			25	EL	
European MED Gasoline (Platts) Swap Contract	663	EU	1.500	1,500		500			25	EU	
European 3.5% Fuel Oil MED (Mediterranean) Calendar Swap Contract	661	UI	1,500	1,500		150			25	UI	
Middle East											
NYMEX Dubai Crude Oil Calendar Swap (Platts) Contract	511	DC	10,000	10.000		1,000			25	DC	
Dubai Crude Oil BALMO Swap Contract	498	BI	10,000	10.000		1,000			25	DC	
Dubai Mercantile Exchange											
DME Oman Crude Oil Futures Contract (See Dubai Mercantile Exchange Chapter 10)		OO	n/a	n/a			n/a		25	OQ	
DME Brent Crude Oil Financial Contract (See Dubai Mercantile Exchange Chapter 13)		ZO	n/a	n/a			n/a		25	ZO	
DME Oman Crude Oil Financial Contract (See Dubai Mercantile Exchange Chapter 14)		ZG	n/a	n/a			n/a		25	ZG	
Asia/Pacific											
Japan											
Japan C&F Naphtha Swap	579	JA	1,000	1,000		100			25	JA	
Japan C&F Naphtha Crack Spread Swap	580	JB	20,000/1,000	20.000/1.000		2,000/100			25	BB	JA
Singapore											
Singapore 380 cst Fuel Oil Futures Contract	675	HZ	7,000	7,000		1.000			25	HZ	
Singapore Gasoil Swap Contract	669	SG	1.500	1,500		500			25	SG	
Singapore Gasoil BALMO Swap Contract	496	VU	1.500	1,500		500			25	SG	
Singapore Jet Kero vs Gasoil Spread Swap Contract	672	RK	1,500/1,500	1,500/1.500		500/500			25	KS	SG
Singapore Naphtha Swap Contract	671	SP	1.500	1,500		500			25	SP	
Singapore Naphtha BALMO Swap Contract	497	KU	1,500	1.500		500			25	SP	
Singapore 380cst Fuel Oil Swap Contract	668	SE	1.500	1,500		150			25	SE	

Singapore 380cst Fuel Oil BALMO Swap Contract	494	BT	1,500	1,500		150			25	SE	
Singapore 180cst vs. 380cst Fuel Oil Spread Swap Contract	667	SD	1,500/1,500	1,500/1,500		500/500			25	UA	SE
European Singapore Fuel Oil 180cst Calendar Swap Contract	662	UA	1,500	1,500		150			25	UA	
Singapore 180cst Fuel Oil BALMO Swap Contract	493	BS	1,500	1,500		150			25	UA	
Singapore Jet Kerosene Swap Contract	670	KS	1,500	1,500		500			25	KS	
Singapore Jet Kero BALMO Swap Contract	495	BX	1,500	1,500		500			25	KS	
Vessel Freight											
Freight Route TC1 Swap Futures Contract	680	TG	10,000	10,000		1,000			25	TG	
Freight Route TC2 Swap Futures Contract	683	TM	5,000	5,000		500			25	TM	
Freight Route TD3 Swap Futures Contract	684	TL	10,000	10,000		2,500			25	TL	
Freight Route TC4 Swap Futures Contract	681	TJ	5,000	5,000		500			25	TJ	
Freight Route TC5 Swap Futures Contract	682	TH	10,000	10,000		1,000			25	TH	
Freight Route TD5 Swap Futures Contract	685	TI	10,000	10,000		2,500			25	TI	
Freight Route TD7 Swap Futures Contract	686	TK	10,000	10,000		1,000			25	TK	
Freight Route TD9 Swap Futures Contract	687	TN	10,000	10,000		1,000			25	TN	
Freight Route TD10D Swap Futures Contract	688	TO	10,000	10,000		1,000			25	TO	
Metals											
USA											
COMEX Division - Aluminum Futures Rules	123	AL	6,000	6,000		350			25	AL	
COMEX Division - Aluminum Futures Options Rules	124	OA							25	AL	
COMEX Division - Copper Contract Rules	111	HG	5,000	5,000		250			25	HG	
COMEX Division - Grade 1 Copper Futures Options Rules	117	HX							25	HG	
COMEX miNY Copper Futures	913	QC	5,000	5,000			400		25	QC	
-											
COMEX Division - Gold Rules	113	GC	6,000	6,000		3,000			200	GC	
COMEX Division - Gold Futures Options Rules	115	OG							200	GC	
COMEX miNY Gold Futures	911	QO	6,000	6,000			3,000		200	QO	
COMEX Division - Silver Rules	112	SI	6,000	6,000		1,500			150	SI	
COMEX Division - Silver Futures Options Rules	116	SO							150	SI	
COMEX miNY Silver Future	912	QI	6,000	6,000			1,500		150	QI	
Platinum Futures Contract	90	PL	1,500	1,500		150			25	PL	

NYMEX Platinum Option Contract	360	PO	20,000	20.000		n/a			25	PL	
Palladium Futures Contract	100	PA	1.000	1,000		650			25	PA	
NYMEX UxC Uranium U3O8 Swap Contract	960	UX	3.500	3,500		1,000			25	UX	
ASIA											
COMEX Asian Gold Futures	914	QS	6,000	6,000			3,000		200	QS	
NYMEX Asian Palladium Futures	916	QT	1,000	1,000			650		50	QT	
NYMEX Asian Platinum Futures	915	QR	1,500	1,500			200		200	QR	
Coal											
Central Appalachian Coal Futures Contract	260	QL	5.000	5,000		200			25	QL	
NYMEX CSX COAL Swap (Platts OTC Broker Index) Contract	261	QX	5.000	5.000		200			25	QX	
NYMEX Powder River Basin Coal Swap (Platts OTC Broker Index) Contract	262	QP	5,000	5,000		200			25	QP	
Emissions											
Annual NOX Emissions Allowance Vintage 2009 Futures Contract	864	WW	4,500	2,500		1,500			25	WW	
Annual NOX Emissions Allowance Vintage 2010 Futures Contract	865	YP	3,500	2,000		1.000			25	YP	
Annual NOX Emissions Allowance Vintage 2011 Futures Contract	866	YQ	3.500	2,000		1,000			25	YQ	
Annual NOX Emissions Allowance Vintage 2012 Futures Contract	867	YR	3.500	2,000		1.000			25	YR	
NYMEX NOX Emissions Allowance Futures Contract	783	RN	2,500	1,200		600			25	RN	
Seasonal NOX Emissions Allowance Vintage 2009 Futures Contract	860	YI	2.500	1,200		600			25	YI	
Seasonal NOX Emissions Allowance Vintage 2010 Futures Contract	861	YJ	2.000	1.000		500			25	YJ	
Seasonal NOX Emissions Allowance Vintage 2011 Futures Contract	862	YN	2.000	1.000		500			25	YN	
Seasonal NOX Emissions Allowance Vintage 2012 Futures Contract	863	YM	2.000	1,000		500			25	YM	
NYMEX SO2 Emissions Allowance Futures Contract	782	RS	2,000	1.000		375			25	RS	
SO2 Emissions Allowance Option Contract	871	AS	2.000	1.000		375			25	RS	
European Union											

Allowance (EUA) Futures Contract	868	RC	10,000	5,000		2,500			25	RC	
European Union Allowance (EUA) Option Contract	869	AV	10,000	5,000		2,500			25	RC	
Certified Emission Reduction (CER) Futures Contract	870	VA	5,000	2,500		1,250			25	VA	
Certified Emission Reduction (CER) Option Contract	872	VG	5,000	2,500		1,250			25	VA	
Natural Gas											
Natural Gas Futures Contract	220	NG	12,000	6,000		1,000			175	NG	
NYMEX Natural Gas Option Contract	370	ON	20,000	6,000		1,000			175	NG	
Natural Gas Calendar Spread Options Contract	391	IA, IB, IC, IE, IM, IZ	12,000	6,000		1,000			175	NG	
Natural Gas Daily Option	832	KD	n/a	n/a		1,000			n/a	HH	
Henry Hub Penultimate Financial Futures Contract	824	HP	12,000	12,000			1,000		100	HP	
Natural Gas Look-Alike Option	560	LN	12,000	12,000			1,000		100	HP	
Henry Hub Natural Gas Penultimate Swap Futures Contract	529	NP	12,000	12,000			1,000		100	HP	
NYMEX Natural Gas miNYFutures Contract	402	OG	12,000	12,000			1,000		175	HP	
Henry Hub Financial Last Day Futures Contract	823	HH	12,000	12,000				1,000	100	HH	
Henry Hub Swap Futures Contract	508	NN	12,000	12,000				1,000	175	HH	
Appalachia											
Dominion Basis Swap (Platts IFERC) Contract	632	PG	10,000	10,000		2,000			25	PG	
Dominion Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	794	IH	10,000	10,000		2,000			25	IH	
Dominion, South Point Natural Gas Swing Contract (Platts Gas Daily)	784	SH	10,000	10,000		2,000			25	SH	
Canadian											
NYMEX AECO/NIT Basis Swap (NGX/CGPR) Contract	516	NA	10,000	10,000		2,000			25	NA	
Alberta "Pipe" Option	516a	PI	10,000	10,000		2,000			25	PI	
Dawn Natural Gas Basis Contract (Platts IFERC)	808	DW	10,000	10,000		2,000			25	DW	
Dawn Natural Gas Swing Contract (Platts Gas Daily)	818	OW	10,000	10,000		2,000			25	OW	
Dawn Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	811	IO	10,000	10,000		2,000			25	IO	
NYMEX Sumas Basis Swap (Platts IFERC) Contract	628	NK	10,000	10,000		1,000			25	NK	
Sumas Natural Gas											

Index Contract (Platt Gas Daily/Platts IFERC)	797	IU	10,000	10 000		1,000			25	IU	
Sumas Natural Gas Swing Contract (Platts Gas Daily)	789	SU	10,000	10.000		1.000			25	SU	
Citygates											
NYMEX Chicago Basis Swap (NGI) Contract	517	NB	10,000	10,000		2,000			175	NB	
Chicago "Pipe" Option	517a	PY	10,000	10.000		2,000			25	PY	
Chicago Natural Gas Index Contract (Platts Gas Daily / NGI)	700	IS	10,000	10.000		2,000			25	IS	
Chicago Natural Gas Swing Contract (Platts Gas Daily)	750	SS	10,000	10.000		2,000			25	SS	
MichCon Basis Swap (Platts IFERC) Contract	619	NF	10,000	10,000		500			175	NF	
PG&E Citygate Basis Swap (NGI) Contract	624	PC	10,000	10.000		2,000			175	PC	
PG&E CITYGATE "Pipe" Option	624a	CW	10,000	10,000		2,000			25	CW	
PG&E Citygate Natural Gas Index Contract (Platt Gas Daily/NGI)	792	IK	10,000	10.000		2.000			25	IK	
PG&E Citygate Natural Gas Swing Contract (Platts Gas Daily)	786	SK	10,000	10.000		2,000			25	SK	
M-3 Basis Swap (Platts IFERC) Contract	621	NX	10,000	10,000		1,500			25	NX	
TETCO M-3 Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	798	IX	10,000	10.000		1,500			25	IX	
TETCO M-3 Natural Gas Swing Contract (Platts Gas Daily)	790	SX	10,000	10.000		1,500			25	SX	
NYMEX Transco Zone 6 Basis Swap (Platts IFERC) Contract	521	NZ	10,000	10.000		1,500			25	NZ	
TRANSCO ZONE 6 "Pipe" Option	521a	TZ	10,000	10,000		1,500			25	TZ	
Transco, Zone 6 Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	799	IT	10,000	10.000		1.500			25	IT	
Transco, Zone 6 Natural Gas Swing Contract (Platts Gas Daily)	791	ST	10,000	10.000		1.500			25	ST	
East Houston - Katy											
NYMEX Houston Ship Channel Basis Swap (Platts IFERC) Contract	518	NH	10,000	10,000		2.000			25	NH	
Houston Ship Channel "Pipe" Option	518a	PK	10,000	10,000		2.000			25	PK	
Houston Ship Channel Natural Gas Index Contract (Platts Gas Daily / Platts IFERC)	703	IP	10,000	10.000		2,000			25	IP	
Houston Ship Channel Natural Gas Swing Contract (Platts Gas Daily)	753	SM	10,000	10,000		2,000			25	SM	
East Texas - North Louisiana											
NGPL Texok Basis Swap (Platts IFERC) Contract	625	PD	10,000	10,000		1,000			175	PD	

NGPL TexOk Natural Gas Swing Contract (Platts Gas Daily)	821	OX	10,000	10,000		1,000			25	OX	
NGPL TexOk Natural Gas Index (Platt Gas Daily/Platts IFERC) Contract	814	OI	10,000	10,000		1,000			25	OI	
Oklahoma											
ANR OK Basis Swap (Platts IFERC) Contract	627	NE	10,000	10,000		500			175	NE	
ANR Oklahoma Natural Gas Swing Contract (Platts Gas Daily)	816	SQ	10,000	10,000		500			25	SQ	
ANR Oklahoma Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	809	IQ	10,000	10,000		500			25	IQ	
CenterPoint Natural Gas Basis Contract (Platts IFERC)	807	PW	10,000	10,000		2,000			25	PW	
CenterPoint Natural Gas Swing Contract (Platts Gas Daily)	817	VX	10,000	10,000		2,000			25	VX	
CenterPoint Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	810	II	10,000	10,000		2,000			25	II	
NGPL Mid-Con Basis Swap (Platts IFERC) Contract	629	NL	10,000	10,000		500			175	NL	
NGPL MidCon Natural Gas Swing Contract (Platts Gas Daily)	820	PX	10,000	10,000		500			25	PX	
NGPL MidCon Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	813	IW	10,000	10,000		500			25	IW	
NYMEX Panhandle Basis Swap (Platts IFERC) Contract	525	PH	10,000	10,000		2,000			175	PH	
PANHANDLE "Pipe" Option	525a	PU	10,000	10,000		2,000			25	PU	
Panhandle Natural Gas Index Contract (Platts Gas Daily / Platts IFERC)	704	IV	10,000	10,000		2,000			25	IV	
Panhandle Natural Gas Swing Contract (Platts Gas Daily)	754	SV	10,000	10,000		2,000			25	SV	
Louisiana - Onshore South											
Henry Hub Natural Gas Index Contract (Platts Gas Daily / Platts IFERC)	702	IN	10,000	10,000		2,000			25	IN	
Henry Hub Natural Gas Swing Contract (Platts Gas Daily)	752	SN	10,000	10,000		2,000			25	SN	
NYMEX Henry Hub Basis Swap (Platts IFERC) Contract	509	HB	12,000	12,000		2,000			175	HB	
ANR Louisiana Basis (Platts IFERC) Futures Contract	767	ND	10,000	10,000		1,000			25	ND	
Columbia Gulf Louisiana Basis Swap (Platts IFERC) Contract	638	GL	10,000	10,000		500			175	GL	

FGT Zone 3 Basis (Platts IFERC) Futures Contract	806	FP	10,000	10,000		500			25	FP	
NGPL LA Basis Swap (Platts IFERC) Contract	626	NY	10,000	10 000		500			175	NY	
Sonat Basis (Platts IFERC) Futures Contract	804	SZ	10,000	10,000		500			25	SZ	
TCO Basis Swap (Platts IFERC) Contract	622	TC	10,000	10,000		2,500			175	TC	
Tennessee 500 Leg Basis (Platts IFERC) Futures Contract	770	NM	10,000	10,000		1,500			25	NM	
Tennessee Zone 0 Basis (Platts IFERC) Futures Contract	771	NQ	10,000	10,000		1,500			25	NQ	
TETCO ELA Basis Swap (Platts IFERC) Contract	640	TE	10,000	10,000		500			175	TE	
Texas Gas, Zone SL Basis (Platts IFERC) Futures Contract	772	TB	10,000	10,000		1,000			25	TB	
Transco Zone 3 Basis Swap (Platts IFERC) Contract	639	CZ	10,000	10,000		1,000			175	CZ	
Trunkline, LA Basis (Platts IFERC) Futures Contract	773	NU	10,000	10,000		1,000			25	NU	
Mississippi - Alabama											
Transco Zone 4 Basis (Platts IFERC) Futures Contract	805	TR	10,000	10,000		500			25	TR	
New Mexico - San Juan Basis											
NYMEX San Juan Basis Swap (Platts IFERC) Contract	519	NJ	10,000	10,000		2,000			25	NJ	
San Juan "Pipe" Option	519a	PJ	10,000	10,000		2,000			25	PJ	
San Juan Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	796	IJ	10,000	10,000		2,000			25	IJ	
San Juan Natural Gas Swing Contract (Platts Gas Daily)	787	SJ	10,000	10,000		2,000			25	SJ	
Permian Basin											
Permian Basis Swap (Platts IFERC) Contract	620	PM	10,000	10,000		2,000			175	PM	
Permian Natural Gas Index Contract (Platts Gas Daily / Platts IFERC)	701	IL	10,000	10,000		2,000			25	IL	
Permian Natural Gas Swing Contract (Platts Gas Daily)	751	SL	10,000	10,000		2,000			25	SL	
NYMEX Waha Basis Swap (Platts IFERC) Futures Contract	634	NW	10,000	10,000		2,000			175	NW	
Waha Natural Gas Index Contract (Platts Gas Daily / Platts IFERC)	705	IY	10,000	10,000		2,000			25	IY	

Waha Natural Gas Swing Contract (Platts Gas Daily)	755	SY	10,000	10.000		2,000			25	SY	
Rockies											
Kern Opal Natural Gas Swing Contract (Platts Gas Daily)	765	SR	10,000	10.000		2.000			25	SR	
Kern River Basis (Platts IFERC) Futures Contract	768	NV	10,000	10,000		1.000			25	NV	
NYMEX CIG Rockies Basis Swap (Platts IFERC) Futures Contract	633	CI	10,000	10.000		1,000			25	CI	
Questar Basis (Platts IFERC) Futures Contract	769	TA	10,000	10,000		1.000			25	TA	
NYMEX Rockies Basis Swap (Platts IFERC) Contract	524	NR	10,000	10,000		2,000			25	NR	
ROCKIES "Pipe" Option	524a	ZR	10.000	10.000		2.000			25	ZR	
Rockies Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	795	IR	10,000	10.000		2,000			25	IR	
South- Corpus Christi											
TETCO STX Basis Swap (Platts IFERC) Contract	641	TX	10,000	10.000		1,000			175	TX	
Others											
Demarc Basis Swap (Platts IFERC) Contract	630	PE	10,000	10,000		1.000			175	PE	
Demarc Natural Gas Swing Contract (Platts Gas Daily)	819	DT	10.000	10,000		1,000			25	DT	
Demarc Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	812	DI	10,000	10.000		1.000			25	DI	
Malin Basis Swap (NGI) Contract	623	PB	10,000	10.000		2,000			25	PB	
NYMEX SoCal Basis Swap (NGI) Contract	520	NS	10,000	10,000		2,000			25	NS	
SOCAL "Pipe" Option	520a	ZN	10,000	10,000		2.000			25	ZN	
SoCal Natural Gas Index Contract (Platt Gas Daily/NGI)	793	IF	10,000	10,000		2,000			25	IF	
SoCal Natural Gas Swing Contract (Platts Gas Daily)	788	SF	10,000	10,000		2,000			25	SF	
Ventura Basis Swap (Platts IFERC) Contract	631	PF	10,000	10,000		2.000			175	PF	
Ventura Natural Gas Swing Contract (Platts Gas Daily)	822	VS	10,000	10,000		2,000			25	VS	
Ventura Natural Gas Index Contract (Platt Gas Daily/Platts IFERC)	815	VI	10,000	10,000		2.000			25	VI	
Propane											
Liquefied Propane Gas Futures Contract	230	PN	1,500	1,500		250			25	PN	
Mt Belvieu Propane (OPIS) Swap	581	PT	1.500	1,500		250			25	PT	

Electricity											
ERCOT Houston Peak Swap (Platts Megawatt Daily) Contract	826	HT	5,000	5,000		500			25	HT	
ERCOT Houston Calendar Day Peak Swap (Platts Megawatt Daily) Contract	826a	HE	5,000	5,000		500			25	HT	
NYMEX ERCOT Broker Houston Index Peak (SNL Energy) Contract	835	ZH	1,500	1,000		190			1	ZH	
NYMEX ERCOT Broker Houston Index Calendar Day Peak (SNL Energy) Contract	835a	VH	100	50		10			1	ZH	
ERCOT Houston MCPE Trading Hub Peak Swap Contract	829	HN	5,000	5,000		500			25	HN	
ERCOT Houston MCPE Trading Hub Calendar Day Peak Swap Contract	829a	HY	5,000	5,000		500			25	HN	
ERCOT North Peak Swap (Platts Megawatt Daily) Contract	827	MT	5,000	5,000		500			25	MT	
ERCOT North Calendar Day Peak Swap (Platts Megawatt Daily) Contract	827a	MC	5,000	5,000		500			25	MT	
NYMEX ERCOT Broker North Index Peak (SNL Energy) Contract	836	ZF	1,500	1,000		260			1	ZF	
NYMEX ERCOT Broker North Index Calendar Day Peak (SNL Energy) Contract	836a	VF	100	50		10			1	ZF	
ERCOT North MCPE Trading Hub Peak Swap Contract	830	MN	5,000	5,000		500			25	MN	
ERCOT North MCPE Trading Hub Calendar Day Peak Swap Contract	830a	MY	5,000	5,000		500			25	MN	
ERCOT Seller's Choice Peak Swap (Platts Megawatt Daily) Contract	828	VT	5,000	5,000		500			25	VT	
ERCOT Seller's Choice Calendar Day Peak Swap (Platts Megawatt Daily) Contract	828a	VC	5,000	5,000		500			25	VT	
NYMEX ERCOT Broker Seller's Choice Index Peak (SNL Energy) Contract	834	ZE	2,500	1,500		350			1	ZE	
NYMEX ERCOT Broker Seller's Choice Index Calendar Day Peak (SNL Energy) Contract	834a	VB	100	50		10			1	ZE	
ERCOT Hub Average MCPE Trading Hub Peak Swap Contract	831	VN	5,000	5,000		500			25	VN	
NYMEX ERCOT Hub Average MCPE Trading Hub Calendar Day Peak Swap Contract	831a	VY	5,000	5,000		500			25	VN	
NYMEX PJM (PJM Interconnection, LLC) Calendar-Month Off-Peak LMP Swap Contract	635a	JP	5,000	5,000		500			25	JP	
NYMEX PJM Calendar-Month LMP Swap (PJM Interconnection, LLC)	635	JM	5,000	5,000		3,000			1	JM	

Futures Contract											
NYMEX PJM Calendar-Day LMP Swap (PJM Interconnection, LLC) Futures Contract	637	JD	5,000	5,000		3,000			1	JM	
PJM Calendar-Month LMP Swap Option	380	JO	5,000	5,000		n/a			25	JM	
NYMEX NYISO Zone A Calendar Day Peak LBMP Swap Contract	616b	AN	10,000/10,000	10,000/10,000		1,000/1,000			25	AN	KA
NYMEX NYISO Zone A Off-Peak LBMP Swap Contract	616a	KB	5,000	5,000		500			25	KB	
NYMEX NYISO Zone G Calendar Day Peak LBMP Swap Contract	617b	GN	10,000/10,000	10,000/10,000		1,000/1,000			25	GN	KG
NYMEX NYISO Zone G Off-Peak LBMP Swap Contract	617a	KH	5,000	5,000		500			25		
NYMEX NYISO Zone J Calendar Day Peak LBMP Swap Contract	618b	JN	10,000/10,000	10,000/10,000		1,000/1,000			25	JN	KJ
NYMEX NYISO Zone J Off-Peak LBMP Swap Contract	618a	KK	5,000	5,000		500			25	KK	
NYMEX Michigan Hub Calendar-Month LMP Swap Contract	776	HM	5,000	5,000		500			25	HM	
NYMEX Michigan Hub Off-Peak LMP Swap Contract	776a	HJ	5,000	5,000		500			25	HJ	
NYMEX Minnesota Hub Calendar-Month LMP Swap Contract	780	LM	5,000	5,000		500			25	LM	
NYMEX Minnesota Hub Off-Peak LMP Swap Contract	780a	LJ	5,000	5,000		500			25	LJ	
NYMEX MISO Illinois Hub Calendar-Month LMP Swap Contract	778	OM	5,000	5,000		500			25	OM	
NYMEX MISO Illinois Hub Off-Peak LMP Swap Contract	778a	OJ	5,000	5,000		500			25	OJ	
Northern Illinois Hub Calendar-Month LMP Swap (PJM Interconnection, LLC) Contract	762	UM	5,000	5,000		500			25	UM	
NYMEX Northern Illinois Hub Calendar-Day LMP Swap (PJM Interconnection, LLC) Contract	763	UD	5,000	5,000		500			25	UM	
NORTHERN ILLINOIS Calendar-Month LMP Swap Option	384	OU	5,000	5,000		n/a			25	UM	
NYMEX Northern Illinois Hub Off-Peak LMP Swap (PJM Interconnection, LLC) Contract	762a	UO	5,000	5,000		500			25	UO	
NYISO Zone A LBMP Swap Contract	616	KA	10,000/10,000	10,000/10,000		1,000/1,000			25	AN	KA
NYISO Zone G LBMP Swap Contract	617	KG	10,000/10,000	10,000/10,000		1,000/1,000			25	GN	KG
NYISO Zone J LBMP Swap Contract	618	KJ	10,000/10,000	10,000/10,000		1,000/1,000			25	JN	KJ

NYMEX AEP-Dayton Hub Calendar-Month LMP Swap (PJM Interconnection, LLC) Contract	765	VM	5,000	5,000		500			25	VM	
NYMEX AEP-Dayton Hub Calendar-Day LMP Swap (PJM Interconnection, LLC) Contract	766	VD	5,000	5,000		500			25	VM	
AEP-DAYTON Calendar-Month LMP Swap Option	392	OT	5,000	5,000		n/a			25	VM	
NYMEX AEP-Dayton Hub Off-Peak LMP Swap (PJM Interconnection, LLC) Contract	765a	VP	5,000	5,000		500			25	VP	
NYMEX Cinergy Hub Calendar-Month LMP Swap Contract	774	EM	5,000	5,000		500			25	EM	
NYMEX Cinergy Hub Calendar Day Peak LMP Swap Contract	774b	CC	5,000	5,000		500			25	EM	
CINERGY Calendar-Month LMP Swap Option	383	OY	5,000	5,000		n/a			25	EM	
NYMEX Cinergy Hub Off-Peak LMP Swap Contract	774a	EJ	5,000	5,000		500			25	EJ	
NYMEX ISO New England Internal Hub Peak LMP Swap Contract	756	NI	5,000	5,000		500			25	NI	
NYMEX ISO New England Internal Hub Calendar Day Peak LMP Swap Contract	756b	CE	5,000	5,000		500			25	NI	
ISO New England Calendar-Month LMP Swap Option	381	OE	5,000	5,000		n/a			25	NI	
NYMEX ISO New England Internal Hub Off-Peak LMP Swap Contract	756a	KI	5,000	5,000		500			25	KI	
NYMEX ERCOT Broker South Index Peak (SNL Energy) Contract	837	ZT	350	250		50			1	ZT	
NYMEX ERCOT Broker South Index Calendar Day Peak (SNL Energy) Contract	837a	VJ	50	25		5			1	ZT	
NYMEX Dow Jones Mid-Columbia Electricity Price Index Swap Contract	643	DO	5,000	5,000		500			25	DO	
NYMEX Dow Jones NP15 Electricity Price Index Swap Contract	644	DN	5,000	5,000		500			25	DN	
NYMEX Dow Jones Palo Verde Electricity Price Index Swap Contract	642	DP	5,000	5,000		500			25	DP	
NYMEX Dow Jones SP15 Electricity Price Index Swap Contract	645	DV	5,000	5,000		500			25	DV	
Equity Index Contracts											
NYMEX Ardour Extra Liquid Global Index Contract		AX	20,000	20,000		2,000			25	AX	
Catastrophe Contracts											
National Property Catastrophe Futures Contract		WU	1,000	1,000		250			1	WU	

National Property Catastrophe Options Contract		XW	1,000	1,000		250			1	WU	
Texas-Maine Property Catastrophe Futures Contract		WY	1,000	1,000		250			1	WY	
Texas-Maine Property Catastrophe Options Contract		XY	1,000	1,000		250			1	WY	
Florida Property Catastrophe Futures Contract		WF	1,000	1,000		250			1	WF	
Florida Property Catastrophe Options Contract		XF	1,000	1,000		250			1	WF	
Soft Commodities											
NYMEX Cocoa Futures Contract	930	CJ	6,000	6,000		300			25	CJ	
NYMEX Coffee Futures Contract	931	KT	5,000	5,000		100			25	KT	
NYMEX Cotton Futures Contract	932	TT			2,500/5,000	50			25	TT	
NYMEX No. 11 Sugar Futures Contract	934	YO	9,000	9,000		100			25	YO	
Currency Commodities											
NYMEX Columbian Peso Futures	968	VE	20,000	12,000		4,000			350	VE	
** **Limit applied on a GROSS Long or Short basis**											

back to top

Change History

9.00 Liability of Exchange: (Amended: 10/08/2004, 05/30/2007)

9.02 Membership in the Clearing House: (Amended: 02/29/96, 10/01/86, 12/01/86, 07/17/89)

9.03 Guaranty Fund: (Amended: 07/01/87, 04/01/91, 06/01/93, 07/01/87, Rule 9.03(E): 8/12/02, 05/16/2003, 03/13/2006)

9.03A Use of the Guaranty Fund: (Adopted: 01/29/99)

9.04 Clearing Procedure: (Amended: 09/16/86, 04/20/87, 03/14/89, 06/01/90, 03/12/93, 08/16/93, 01/07/94, 03/21/94, 07/20/98, 10/08/2004, 11/29/2006, 5/3/2007)

9.04A NYMEX ClearPort® Clearing: Use of EFS and EFP Procedures for Trade Submission: (Amended: 01/24/03, 10/08/2004, 05/23/2005)

9.05 Margins: (Amended: 09/16/86, 10/10/86, 02/25/91, 04/01/92, 09/25/92, 05/19/98, 6/01/2001, 01/11/2002, 10/08/2004, 12/19/2006, 07/20/2007)

9.07 Limit of Clearing House Losses: (Amended: 10/08/2004)

9.08 Clearing House Not Liable to Customer: (Amended: 09/16/1986, 10/08/2004)

9.09 Clearing Fees: (Amended: 04/29/88, 09/09/91, 02/10/97)

9.10A Offsetting NYMEX miNY™ and Regular Futures Positions: Added 06/09/2006

9.11A Give-Up Trades - Trades Executed by Open Outcry: (Adopted 08/01/2001, Amended 08/04/2001)

9.14 Omnibus Accounts: (Amended: 09/16/1986, 07/21/1988)

9.15 Refund of Clearing Fees: (Amended: 10/26/1989)

9.16 Transaction Fees: (Amended: 10/08/2004, 05/30/2007)

9.17 Delivery Procedure: (Amended: 10/08/2004, 05/30/2007)

9.18 Delivery Through Clearing House: (Amended: 10/08/2004, 05/30/2007)

9.19 Final Day of Trading: (Amended: 09/16/86, 03/02/00, 04/10/03, 05/30/2007)

9.19A Transfers to Correct Errors Occurring on the Last Day of Trading: (Amended: 11/29/2006)

9.20 Position Limits: (Amended: 09/16/86, 11/11/86, 07/01/87, 07/24/87, 11/15/91, 06/15/2001, 05/16/2003, 03/13/2006)

9.21 Minimum Capital Requirements and Transfer Restrictions on Common Stock: (Amended: 01/02/87, 03/01/92, 10/27/97, 06/30/2001, 07/26/2001, 05/16/2003)

9.22 Financial Reporting: (Amended: 07/13/90, 05/19/98, 05/19/98)

9.23 Protection of Clearing House: (Amended: 09/16/1986, 07/01/1987, 03/01/1993, 11/07/1994, 8/14/2002, 05/16/2003, 10/08/2004)

9.24 Original Margin Depositories and Originators of Letters of Credit: (Amended: 12/12/89, 01/07/91, 03/21/91, 06/30/99, 03/07/05, 1/11/06, 11/01/06, 12/19/06)

9.26 All Month/Any One Month Position Accountability: (Amended: 09/16/86, 01/16/87, 05/04/87, 08/21/87, 10/02/89, 12/08/87, 02/12/90, 02/12/90, 10/16/90, 02/28/92, 04/20/92, 06/05/92, 08/24/92, 09/03/92, 02/16/93, 09/20/93, 12/26/94, 03/29/96, 09/27/96, 08/11/97, 07/10/98, 12/01/99, 05/04/00; Retitled and Amended 06/15/2001, Amended: 07/12/2001, 09/05/2001, 04/15/2003, 06/2003, 12/24/2003, 03/04/2004, 03/19/2004, 06/07/2004, 07/26/2004, 08/19/2004, 10/01/2004, 11/01/2004, 02/04/2005, 02/10/2005, 02/11/2005, 02/18/2005, 03/07/2005, 04/12/2005, 04/25/2005, 05/18/2005, 07/28/2005, 08/24/2005, 9/21/2005, 09/29/2005, 01/11/2006, 02/21/2006, 03/10/2006, 05/03/2006, 11/29/2006)

9.27 Expiration and Current Delivery Month Position Limits: (Amended: 08/29/88, 02/13/89, 06/23/90, 04/24/92, 10/02/92, 09/20/93, 03/29/96, 09/27/96, 10/17/96, 08/11/97, 07/10/98, 05/04/00, Retitled and Amended 06/15/2001, Amended: 07/12/2001, 12/20/2002, 04/15/2003, 06/2003, 12/24/2003, 03/04/2004, 03/19/2004, 04/30/2004, 06/07/2004, 07/26/2004, 08/19/2004, 10/01/2004, 11/01/2004, 02/04/2005, 02/10/2005, 02/11/2005, 02/18/2005, 04/12/2005, 04/25/2005, 05/09/2005, 05/18/2005, 07/28/2005, 09/21/2005, 09/29/2005, 01/11/2006, 02/21/2006, 3/10/2006, 05/03/2006, 11/29/2006, 12/22/2006, 5/3/2007)

9.27A Expiration Position Accountability Levels: (Adopted 10/16/06; Amended 01/11/07, 02/23/07)

9.28 Exemptions from Position Limits for Bona Fide Hedging Transactions: (Retitled and Amended 06/15/2001)
Amended: 09/16/86, 05/04/87, 08/29/88, 11/09/89, 11/26/91, 03/25/93, 04/26/93, 07/16/93, 04/09/99, 12/22/2006)

9.29 Exemptions from Position Limits for Exposure from Commodity Swap Transactions. (Amended: 08/22/88, 11/29/90, 09/11/92, 03/25/94, 06/15/2001, 12/22/2006)

9.29A Exemptions from Position Limits for Exposure Associated with NYMEX Physical versus Cash Settled Arbitrage Transactions: (Amended: 11/29/2006)

9.30 Hedge Notice: (Amended: 09/16/86, 08/29/88, 02/13/89, 06/15/2001)

9.31 Revised Hedge Notice: (Amended: 09/16/86, 05/04/87, 08/29/88, 02/13/89)

9.32 Action by the Exchange. (Amended: 09/16/86, 05/04/87, 09/29/88, 06/15/2001, 12/22/2006)

9.33 Position Reporting: (Amended: 09/16/86, 05/04/87, 11/02/89, 04/25/91, 06/01/92, 09/18/92, 02/28/94, 11/29/2006, 05/23/2007)

9.34 Reporting Levels: (Rule 9.34 Renumbered as 9.35 and amended: 09/16/86, 05/04/87, 08/21/87, 08/29/88, 10/02/89, 10/19/90, 04/20/92, 06/05/92, 09/18/92, 10/02/92, 03/15/93, 03/29/96, 07/18/96, 09/27/96, 07/10/98, 05/04/00, 06/15/2001, 07/12/2001, 04/08/2003, 06/2003, 03/19/2004, 06/07/2004, 07/26/2004, 08/19/2004, 10/01/2004, 11/01/2004, 02/10/2005, 02/11/2005, 02/18/2005, 03/07/2005, 04/12/2005, 04/25/2005, 05/18/2005, 07/28/2005, 01/11/2006, 02/21/2006, 03/10/2006, 05/03/2006)

9.35 Aggregation: (Rule 9.35 renumbered as 9.36 and amended: 09/16/86), (Rule 9.36 renumbered as 9.35: 05/04/87; Amended: 08/29/88)

9.36 Penalties: (Amended: 08/29/88, 02/13/89, 06/23/90, 09/20/93, 01/22/96)

9.36A Appeal / Settlement. (Adopted. 09/20/93)

9.37 Required Use of ATOM by Clearing Members and Floor Brokers: ((Renumbered from Rule 9.40 to 9.37 on 10/08/2004) (Adopted: 09/27/96; Reserved: 07/08/00, Rule 11.25 renumbered as Rule 9.40 06/15/2002))

9.37A Reserved: (formerly) Use Of Common AWS Operators by Clearing Members. (Adopted: 06/24/93: Reserved: 07/08/00)

9.38 Participation by NYMEX Floor Members in Special Program for Over-the-Counter Trading with FCM Guarantee: (formerly) Trade Limit Monitoring System. (Adopted: 06/24/93; Reserved: 07/08/00. Current Rule adopted 10/08/2004)

9.39 Special Capital Provisions for Clearing Members Guaranteeing and Clearing OTC Contracts Executed by NYMEX Floor Members: (formerly) Authorized Communications (Adopted. 06/24/93; Reserved: 07/08/00. . Current Rule adopted 10/08/2004)

9.40C Clearing Requirements for Clearing of Over-the-Counter Option Transactions in Exchange-Designated Pari-mutuel Auctions: (Adopted: 10/08/2004)

9.41 Special Capital Provisions for Clearing Members Guaranteeing and Clearing OTC Contracts Executed by NYMEX Floor Members: (Amended: 02/04/2005)

Home About the Exchange News Markets Education Visitors Resources Shareholder Relations

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Exchange-Wide Margin Requirements

NYMEX Division
CME Globex® Listed Financially-Settled & miNY™ Futures
COMEX Division
NYMEX ClearPort®

If you would like to receive e-mail notifications when Exchange margins change, please enter your e-mail address below, and click submit. Submit

Tier Requirements

View Inter-Commodity Spread Credits

NYMEX Division Margin Requirements

Commodity		Outright Margins				Intra/Inter Commodity Straddle Margins								
Symbol	Name	Clearing Member/ Maintenance	Member Customer Initial	Non-Member Customer Initial	Additional Spot Month Assessment	Tier 1[‡]	Tier 2[‡]	Tier 3[‡]	Tier 4[‡]	Tier 5[‡]	Tier 6[‡]	Tier 7	Tier 8[‡]	Tier 9[‡]
CL	Crude Oil	$7,500	$8,250	$10,125	$3.000[1]	$450	$400	$300	$300	N/A	N/A	N/A	N/A	N/A
NG	Natural Gas (Tier 1)	$7,500	$8.250	$10,125	$3,000[1]	$750	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NG	Natural Gas (Tier 2)	$7,500	$8.250	$10,125	N/A	N/A	$500	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NG	Natural Gas (Tier 3)	$8,000	$8,800	$10,800	N/A	N/A	N/A	$500	N/A	N/A	N/A	N/A	N/A	N/A
NG	Natural Gas (Tier 4)	$8,500	$9,350	$11,475	N/A	N/A	N/A	N/A	$500	N/A	N/A	N/A	N/A	N/A
NG	Natural Gas (Tier 5)	$5,500	$6,050	$7,425	N/A	N/A	N/A	N/A	N/A	$500	N/A	N/A	N/A	N/A
NG	Natural Gas (Tier 6)	$5,500	$6,050	$7,425	N/A	N/A	N/A	N/A	N/A	N/A	$500	N/A	N/A	N/A
NG	Natural Gas (Tier 7)	$4,500	$4,950	$6,075	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$500	N/A	N/A
NG	Natural Gas (Tier 8)	$4,250	$4,675	$5,738	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$500	N/A
NG	Natural Gas (Tier 9)	$3,750	$4,125	$5,063	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$250
HO	Heating Oil (Tier 1)	$9,000	$9,900	$12,150	$3,000[1]	$250	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HO	Heating Oil (Tier 2)	$8,500	$9,350	$11,475	N/A	N/A	$150	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HO	Heating Oil (Tier 3)	$7,500	$8,250	$10,125	N/A	N/A	N/A	$150	N/A	N/A	N/A	N/A	N/A	N/A
HO	Heating Oil (Tier 4)	$7,000	$7,700	$9,450	N/A	N/A	N/A	N/A	$100	N/A	N/A	N/A	N/A	N/A
RB	RBOB Gasoline (Tier 1)	$7,500	$8,250	$10,125	$3,000[1]	$200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RB	RBOB Gasoline (Tier 2)	$7,000	$7,700	$9,450	N/A	N/A	$200	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RB	RBOB Gasoline (Tier 3)	$6,250	$6.875	$8,438	N/A	N/A	N/A	$150	N/A	N/A	N/A	N/A	N/A	N/A
RB	RBOB Gasoline (Tier 4)	$6,000	$6.600	$8,100	N/A	N/A	N/A	NA	$200	N/A	N/A	N/A	N/A	N/A
RE	Russian Export Blend Crude Oil (REBCO)	$7,000	$7,700	$9,450	N/A	$400	$250	$150	$100	N/A	N/A	N/A	N/A	N/A
PN	Propane Gas	$3.250	$3,575	$4.388	$3,000[1]	$400	$250	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QL	CAPP Coal	$11,000	$12,100	$14,850	$3,000[1]	$400	$250	$150	$100	N/A	N/A	N/A	N/A	N/A
QP	PRB Coal Swap	$2,500	$2,750	$3,375	N/A	$400	$250	$150	$100	N/A	N/A	N/A	N/A	N/A
QX	CSX Coal Swap	$5,000	$5,500	$6,750	N/A	$250	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PL	Platinum	$6,000	$6,600	$8,100	$1,000[2]	$500	$300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PA	Palladium	$2,750	$3,025	$3,713	$1,000[2]	$500	$300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CH	Heating Oil Crack Spread Options	$600	$660	$810	N/A	$200	$100	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CG	Gasoline Crack Spread Options	$600	$660	$810	N/A	$200	$100	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QE	New York Harbor Ethanol	$4,500	$4,950	$6,075	$3,000[5]	$400	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

CME Globex® Listed Financially-Settled & miNY™ Futures

Commodity		Outright Margins				Intra/Inter Commodity Straddle Margins								
Symbol	Name	Clearing Member/ Maintenance	Member Customer Initial	Non-Member Customer Initial	Additional Spot Month Assessment	Tier 1[‡]	Tier 2[‡]	Tier 3[‡]	Tier 4[‡]	Tier 5[‡]	Tier 6[‡]	Tier 7	Tier 8[‡]	Tier 9[‡]

UX	Uranium	$2,000	$2,000	$2,700	N/A	$500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QM	NYMEX miNY™ Crude Oil	$3.625	$3.988	$4,894	N/A	$125	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BB	Brent Crude Oil	$7,000	$7,700	$9,450	N/A	$400	$250	$150	$100	N/A	N/A	N/A	N/A	N/A
BZ	Brent Crude Oil - Last Day	$7,000	$7,700	$9,450	N/A	$400	$250	$150	$100	N/A	N/A	N/A	N/A	N/A
CY	Brent Crude Oil	$7,000	$7,700	$9,450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WX	NYMEX 321 PLUS Index	$2,500	$2,750	$3,375	N/A	$300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 1)	$1,875	$2,063	$2,531	N/A	$188	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 2)	$1,875	$2,063	$2,531	N/A	N/A	$125	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 3)	$2,000	$2,000	$2,700	N/A	N/A	N/A	$125	N/A	N/A	N/A	N/A	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 4)	$2,125	$2,338	$2,869	N/A	N/A	N/A	N/A	$125	N/A	N/A	N/A	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 5)	$1,375	$1,513	$1,856	N/A	N/A	N/A	N/A	N/A	$125	N/A	N/A	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 6)	$1,375	$1,513	$1,856	N/A	N/A	N/A	N/A	N/A	N/A	$125	N/A	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 7)	$1,125	$1,238	$1,519	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$125	N/A	N/A
QG	NYMEX miNY™ Natural Gas (Tier 8)	$1,063	$1,169	$1,434	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$125	N/A
QG	NYMEX miNY™ Natural Gas (Tier 9)	$938	$1,031	$1,266	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$63
QH	NYMEX miNY™ Heating Oil (Tier 1)	$4,500	$4,950	$6,075	N/A	$125	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QH	NYMEX miNY™ Heating Oil (Tier 2)	$4,250	$4,675	$5,738	N/A	N/A	$75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QH	NYMEX miNY™ Heating Oil (Tier 3)	$3,750	$4,125	$5,063	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QH	NYMEX miNY™ Heating Oil (Tier 4)	$3,500	$3,850	$4,725	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RT	RBOB Gasoline (Tier 1)	$7,500	$8,250	$10,125	N/A	$200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RT	RBOB Gasoline (Tier 2)	$7,000	$7,700	$9,450	N/A	N/A	$200	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RT	RBOB Gasoline (Tier 3)	$6,250	$6,875	$8,438	N/A	N/A	N/A	$150	N/A	N/A	N/A	N/A	N/A	N/A
RT	RBOB Gasoline (Tier 4)	$6,000	$6,600	$8,100	N/A	N/A	N/A	N/A	$150	N/A	N/A	N/A	N/A	N/A
LR	Gulf Coast Gasoline	$4,000	$4,400	$5,400	$3,000	$500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LU	Gulf Coast Ultra Low Sulfur Diesel (ULSD)	$6,000	$6,600	8,100	$3,000	$480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QU	NYMEX miNY™ Gasoline (Tier 1)	$3,750	$4,125	$5,063	N/A	$125	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QU	NYMEX miNY™ Gasoline (Tier 2)	$3,500	$3,850	$4,725	N/A	$250	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QU	NYMEX miNY™ Gasoline (Tier 3)	$3,125	$3.438	$4,219	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QU	NYMEX miNY™ Gasoline (Tier 4)	$3,000	$3,300	$4,050	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QC	COMEX miNY™ Copper	$2,875	$2,675	$3,882	N/A	$40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QO	COMEX miNY™ Gold	$1,625	$1,625	$2,194	N/A	$25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QI	COMEX miNY™ Silver	$2,500	$2,500	$3,375	N/A	$40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QS	COMEX Asian Gold	$1,045	$1,045	$1,411	N/A	$20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QR	NYMEX Asian Platinum	$1,929	$2,122	$2,605	N/A	$160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QT	NYMEX Asian Palladium	$442	$486	$597	N/A	$80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LK	COMEX London Copper Grade A	$2,200	$2,200	$2,970	N/A	$80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LZ	COMEX London SHG Zinc	$3,000	$3,000	$4.050	N/A	$160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LA	COMEX London Primary Aluminum	$1,400	$1,400	$1,890	N/A	$80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CJ	NYMEX Cocoa	$2,500	$2,750	$3,375	N/A	$150	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KT	NYMEX Coffee	$5,000	$5,500	$6,750	N/A	$150	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TT	NYMEX Cotton	$3,500	$3,850	$4,725	N/A	$300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
YO	NYMEX Sugar #11	$1,500	$1,650	$2,025	N/A	$200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AX	Ardour Global XL Equity Index Futures	$3,500	$3,850	$4,725	N/A	-	-	-	-	-	-	-	-	-
	NYMEX Crude Oil MACI													

XC	Index	$1,550	$1,705	$2,092	N/A	-	-	-	-	-	-	-	-	-
XK	NYMEX Crude Oil Backwardation/Contango Index	$200	$220	$270	N/A	-	-	-	-	-	-	-	-	-
WU	Nationwide Catastrophe Insurance	$8,000	$8,800	$10,800	N/A	-	-	-	-	-	-	-	-	-
WY	Texas to Maine (except Florida) Catastrophe Insurance	$3,500	$3,850	$4,725	N/A	-	-	-	-	-	-	-	-	-
WF	Florida Catastrophe Insurance	$3,500	$3,850	$4,725	N/A	-	-	-	-	-	-	-	-	-

COMEX Division Margin Requirements

Commodity		Outright Margins			Intra-Commodity / Inter-Month Spreads		
Symbol	Name	Clearing Member/ Maintenance	Member & Hedge Customer	Non-Member Customer	Clearing Member/ Maintenance	Member & Hedge Customer	Non-Member Customer
AL	Aluminum	$2,250	$2,250	$3,038	$80	$80	$108
HG	Copper	$5,750	$5,750	$7,763	$80	$80	$108
GC	Gold	$3,250	$3,250	$4,300	$50	$50	$68
SI	Silver	$5,000	$5,000	$6,750	$80	$80	$108

NYMEX ClearPort Margin Requirements

Commodity		Outright Margins			Additional Spot Month Assessment 3, 4	Intra-Commodity / Inter-Month Spreads		
Symbol	Name	Clearing Member/ Maintenance	Member Initial	Non-Member Customer Initial		Clearing Member/ Maintenance	Member Initial	Non-Member Customer Initial
Natural Gas Markets								
NN	Henry Hub Swap (Tier 1)	$1,875	$2,063	$2,531	$750	$188	$206	$253
NN	Henry Hub Swap (Tier 2)	$1,875	$2,063	$2,531	N/A	$125	$138	$169
NN	Henry Hub Swap (Tier 3)	$2,000	$2,000	$2,700	N/A	$125	$138	$169
NN	Henry Hub Swap (Tier 4)	$2,125	$2,338	$2,869	N/A	$125	$138	$169
NN	Henry Hub Swap (Tier 5)	$1,375	$1,513	$1,856	N/A	$125	$138	$169
NN	Henry Hub Swap (Tier 6)	$1,375	$1,513	$1,856	N/A	$125	$138	$169
NN	Henry Hub Swap (Tier 7)	$1,125	$1,238	$1,519	N/A	$125	$138	$169
NN	Henry Hub Swap (Tier 8)	$1,063	$1,169	$1,434	N/A	$125	$138	$169
NN	Henry Hub Swap (Tier 9)	$938	$1,031	$1,266	N/A	$63	$69	$84
NP	Henry Hub Penultimate Swap (Tier 1)	$1,875	$2,063	$2,531	N/A	$188	$206	$253
NP	Henry Hub Penultimate Swap (Tier 2)	$1,875	$2,063	$2,531	N/A	$125	$138	$169
NP	Henry Hub Penultimate Swap (Tier 3)	$2,000	$2,000	$2,700	N/A	$125	$138	$169
NP	Henry Hub Penultimate Swap (Tier 4)	$2,125	$2,338	$2,869	N/A	$125	$138	$169
NP	Henry Hub Penultimate Swap (Tier 5)	$1,375	$1,513	$1,856	N/A	$125	$138	$169
NP	Henry Hub Penultimate Swap (Tier 6)	$1,375	$1,513	$1,856	N/A	$125	$138	$169
NP	Henry Hub Penultimate Swap (Tier 7)	$1,125	$1,238	$1,519	N/A	$125	$138	$169
NP	Henry Hub Penultimate Swap (Tier 8)	$1,063	$1,169	$1,434	N/A	$125	$138	$169
NP	Henry Hub Penultimate Swap (Tier 9)	$938	$1,031	$1,266	N/A	$63	$69	$84
HP	Natural Gas Penultimate (Tier 1)	$7,500	$8,250	$10,125	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 2)	$7,500	$8,250	$10,125	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 3)	$8,000	$8,800	$10,800	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 4)	$8,500	$9,350	$11,475	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 5)	$5,500	$6,050	$7,425	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 6)	$5,500	$6,050	$7,425	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 7)	$4,500	$4,950	$6,075	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 8)	$4,250	$4,675	$5,738	N/A	-	-	-
HP	Natural Gas Penultimate (Tier 9)	$3,750	$4,125	$5,063	N/A	-	-	-
HH	Natural Gas Last Day (Tier 1)	$7,500	$8,250	$10,125	N/A	-	-	-
HH	Natural Gas Last Day (Tier 2)	$7,500	$8,250	$10,125	N/A	-	-	-
HH	Natural Gas Last Day (Tier 3)	$8,000	$8,800	$10,800	N/A	-	-	-
HH	Natural Gas Last Day (Tier 4)	$8,500	$9,350	$11,475	N/A	-	-	-
HH	Natural Gas Penultimate (Tier 5)	$5,500	$6,050	$7,425	N/A	-	-	-
HH	Natural Gas Last Day (Tier 6)	$5,500	$6,050	$7,425	N/A	-	-	-
HH	Natural Gas Last Day (Tier 7)	$4,500	$4,950	$6,075	N/A	-	-	-

HH	Natural Gas Last Day (Tier 8)	$4,250	$4,675	$5,738	N/A	-	-	-
HH	Natural Gas Last Day (Tier 9)	$3,750	$4,125	$5,063	N/A	-	-	-
WS	Crude Oil	$7,500	$8,250	$10,125	N/A	-	-	-
BH	Heating Oil (Tier 1)	$9,000	$9,900	$12,150	N/A	-	-	-
BH	Heating Oil (Tier 2)	$8,500	$9,350	$11,475	N/A	-	-	-
BH	Heating Oil (Tier 3)	$7,500	$8,250	$10,125	N/A	-	-	-
BH	Heating Oil (Tier 4)	$7,000	$7,700	$9,450	N/A	-	-	-
SN	Henry Hub Swing Swap	$1,875	$2,063	$2,531	N/A	$50	$55	$68
IN	Henry Hub Index Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IN	Henry Hub Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IN	Henry Hub Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
CI	CIG Rockies Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
CI	CIG Rockies Swap (Tier 2)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
CI	CIG Rockies Swap (Tier 3)	$750	$825	$1,013	N/A	$25	$28	$34
CI	CIG Rockies Swap (Tier 4)	$500	$550	$675	N/A	$25	$28	$34
CI	CIG Rockies Swap (Tier 5)	$500	$550	$675	N/A	$25	$28	$34
NW	Waha Swap (Tier 1)	$500	$550	$675	N/A	$25	$28	$34
NW	Waha Swap (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
NW	Waha Swap (Tier 3)	$300	$330	$405	N/A	$25	$28	$34
NW	Waha Swap (Tier 4)	$200	$220	$270	N/A	$25	$28	$34
NW	Waha Swap (Tier 5)	$200	$220	$270	N/A	$25	$28	$34
SY	Waha Swing Swap	$2,000	$2,200	$2,700	N/A	$50	$55	$68
IY	Waha Index Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IY	Waha Index Swap (Tier 2)	$125	$138	$169	N/A	$25	$28	$34
IY	Waha Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
NA	Alberta Basis Swap (Tier 1)	$800	$880	$1,080	N/A	$25	$28	$34
NA	Alberta Basis Swap (Tier 2)	$800	$880	$1,080	N/A	$25	$28	$34
NA	Alberta Basis Swap (Tier 3)	$300	$330	$405	N/A	$25	$28	$34
NA	Alberta Basis Swap (Tier 4)	$300	$330	$405	N/A	$25	$28	$34
NA	Alberta Basis Swap (Tier 5)	$300	$330	$405	N/A	$25	$28	$34
NB	Chicago Basis Swap (Tier 1)	$500	$550	$675	N/A	$25	$28	$34
NB	Chicago Basis Swap (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
SS	Chicago City Gate Swing Swap	$2,000	$2,200	$2,700	N/A	$50	$55	$68
IS	Chicago Index Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IS	Chicago Index Swap (Tier 2)	$125	$138	$169	N/A	$25	$28	$34
IS	Chicago Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
HB	Henry Hub Basis Swap (Tier 1)	$50	$55	$68	N/A	$25	$28	$34
HB	Henry Hub Basis Swap (Tier 2)	$50	$55	$68	N/A	$25	$28	$34
NH	Houston Ship Channel Basis Swap (Tier 1)	$400	$440	$540	N/A	$25	$28	$34
NH	Houston Ship Channel Basis Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
NH	Houston Ship Channel Basis Swap (Tier 3)	$200	$220	$270	N/A	$25	$28	$34
NH	Houston Ship Channel Basis Swap (Tier 4)	$100	$110	$135	N/A	$25	$28	$34
NH	Houston Ship Channel Basis Swap (Tier 5)	$100	$110	$135	N/A	$25	$28	$34
SM	Houston Ship Channel Swing Swap	$2,000	$2,200	$2,700	N/A	$50	$55	$68
IP	Houston Ship Channel Index Swap (Tier 1)	$1,200	$1,320	$1,620	N/A	$25	$28	$34
IP	Houston Ship Channel Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IP	Houston Ship Channel Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
NJ	San Juan Basis Swap (Tier 1)	$750	$825	$1,013	N/A	$25	$28	$34
NJ	San Juan Basis Swap (Tier 2)	$500	$550	$675	N/A	$25	$28	$34
NJ	San Juan Basis Swap (Tier 3)	$250	$275	$338	N/A	$25	$28	$34
NJ	San Juan Basis Swap (Tier 4)	$250	$275	$338	N/A	$25	$28	$34
NJ	San Juan Basis Swap (Tier 5)	$250	$275	$338	N/A	$25	$28	$34
IJ	San Juan Index Swap (Tier 1)	$1,200	$1,320	$1,620	N/A	$25	$28	$34

IJ	San Juan Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IJ	San Juan Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
SJ	San Juan Swing Swap	$3,000	$3,300	$4,050	N/A	$100	$110	$135
NS	SoCal Basis Swap (Tier 1)	$600	$660	$810	N/A	$25	$28	$34
NS	SoCal Basis Swap (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
NS	SoCal Basis Swap (Tier 3)	$400	$440	$540	N/A	$25	$28	$34
NS	SoCal Basis Swap (Tier 4)	$200	$220	$270	N/A	$25	$28	$34
NS	SoCal Basis Swap (Tier 5)	$200	$220	$270	N/A	$25	$28	$34
IF	SoCal Index Swap (Tier 1)	$1,800	$1,980	$2,430	N/A	$25	$28	$34
IF	SoCal Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IF	SoCal Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
SF	SoCal Swing Swap	$3,000	$3,300	$4,050	N/A	$100	$110	$135
NZ	Transco Zone 6 Basis Swap (Tier 1)	$2,000	$2,200	$2,700	N/A	$25	$28	$34
NZ	Transco Zone 6 Basis Swap (Tier 2)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
NZ	Transco Zone 6 Basis Swap (Tier 3)	$500	$550	$675	N/A	$25	$28	$34
NZ	Transco Zone 6 Basis Swap (Tier 4)	$400	$440	$540	N/A	$25	$28	$34
NZ	Transco Zone 6 Basis Swap (Tier 5)	$400	$440	$540	N/A	$25	$28	$34
IT	Transco Zone 6 Index Swap (Tier 1)	$3,000	$3,300	$4,050	N/A	$25	$28	$34
IT	Transco Zone 6 Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IT	Transco Zone 6 Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
ST	Transco Zone 6 Swing Swap	$9,000	$9,900	$12,150	N/A	$100	$110	$135
NR	Northwest Pipeline, Rockies Basis Swap (Tier 1)	$1,200	$1,320	$1,620	N/A	$25	$28	$34
NR	Northwest Pipeline, Rockies Basis Swap (Tier 2)	$1,000	$1,100	$1,350	N/A	$25	$28	$34
NR	Northwest Pipeline, Rockies Basis Swap (Tier 3)	$800	$880	$1,080	N/A	$25	$28	$34
NR	Northwest Pipeline, Rockies Basis Swap (Tier 4)	$600	$660	$810	N/A	$25	$28	$34
NR	Northwest Pipeline, Rockies Basis Swap (Tier 5)	$400	$440	$540	N/A	$25	$28	$34
IR	Rockies Index Swap (Tier 1)	$4,000	$4,400	$5,400	N/A	$25	$28	$34
IR	Rockies Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IR	Rockies Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
NV	Kern River, Wyoming Basis (Tier 1)	$625	$688	$844	N/A	$25	$28	$34
NV	Kern River, Wyoming Basis (Tier 2)	$325	$358	$439	N/A	$25	$28	$34
NV	Kern River, Wyoming Basis (Tier 3)	$300	$330	$405	N/A	$25	$28	$34
NV	Kern River, Wyoming Basis (Tier 4)	$175	$193	$236	N/A	$25	$28	$34
NV	Kern River, Wyoming Basis (Tier 5)	$100	$110	$135	N/A	$25	$28	$34
SR	Kern Opal Swing Swap	$7,000	$7,700	$9,450	N/A	$100	$110	$135
TA	Questar Basis (Tier 1)	$900	$990	$1,215	N/A	$25	$28	$34
TA	Questar Basis (Tier 2)	$325	$358	$439	N/A	$25	$28	$34
TA	Questar Basis (Tier 3)	$300	$330	$405	N/A	$25	$28	$34
TA	Questar Basis (Tier 4)	$175	$193	$236	N/A	$25	$28	$34
TA	Questar Basis (Tier 5)	$100	$110	$135	N/A	$25	$28	$34
PH	Panhandle Basis Swap (Tier 1)	$750	$825	$1,013	N/A	$25	$28	$34
PH	Panhandle Basis Swap (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
PH	Panhandle Basis Swap (Tier 3)	$300	$330	$405	N/A	$25	$28	$34
PH	Panhandle Basis Swap (Tier 4)	$300	$330	$405	N/A	$25	$28	$34
PH	Panhandle Basis Swap (Tier 5)	$300	$330	$405	N/A	$25	$28	$34
SV	Panhandle Swing Swap	$2,000	$2,200	$2,700	N/A	$50	$55	$68
IV	Panhandle Index Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IV	Panhandle Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IV	Panhandle Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
NF	Michcon Basis (Tier 1)	$400	$440	$540	N/A	$25	$28	$38
NF	Michcon Basis (Tier 2)	$250	$275	$338	N/A	$25	$28	$34
NF	Michcon Basis (Tier 3)	$200	$220	$270	N/A	$25	$28	$34
PM	Permian Basis (Tier 1)	$750	$825	$1,013	N/A	$25	$28	$34
PM	Permian Basis (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
PM	Permian Basis (Tier 3)	$300	$330	$405	N/A	$25	$28	$34

PM	Permian Basis (Tier 4)	$300	$330	$405	N/A	$25	$28	$34
PM	Permian Basis (Tier 5)	$300	$330	$405	N/A	$25	$28	$34
SL	El Paso/Permian Swing Swap	$4,000	$4,400	$5,400	N/A	$50	$55	$68
IL	El Paso/Permian Index Swap (Tier 1)	$2.000	$2 200	$2,700	N/A	$25	$28	$34
IL	El Paso/Permian Index Swap (Tier 2)	$500	$550	$675	N/A	$25	$28	$34
IL	El Paso/Permian Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
NX	Texas Eastern Zone M-3 Basis (Tier 1)	$500	$550	$675	N/A	$25	$28	$34
NX	Texas Eastern Zone M-3 Basis (Tier 2)	$500	$550	$675	N/A	$25	$28	$34
NX	Texas Eastern Zone M-3 Basis (Tier 3)	$500	$550	$675	N/A	$25	$28	$34
NX	Texas Eastern Zone M-3 Basis (Tier 4)	$300	$330	$405	N/A	$25	$28	$34
NX	Texas Eastern Zone M-3 Basis (Tier 5)	$200	$220	$270	N/A	$25	$28	$34
IX	TETCO M-3 Index Swap (Tier 1)	$2,000	$2,200	$2,700	N/A	$25	$28	$34
IX	TETCO M-3 Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IX	TETCO M-3 Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
SX	TETCO M-3 Swap Swing Swap	$5,000	$5,500	$6,750	N/A	$100	$110	$135
TB	Texas Gas, Zone SL Basis (Tier 1)	$300	$330	$405	N/A	$25	$28	$34
TB	Texas Gas, Zone SL Basis (Tier 2)	$100	$110	$135	N/A	$25	$28	$34
NQ	Tennessee Zone 0 Basis (Tier 1)	$300	$330	$405	N/A	$25	$28	$34
NQ	Tennessee Zone 0 Basis (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
NM	Tennessee 500 Leg Basis (Tier 1)	$150	$165	$203	N/A	$25	$28	$34
NM	Tennessee 500 Leg Basis (Tier 2)	$150	$165	$203	N/A	$25	$28	$34
TC	TCO Basis Swap (Tier 1)	$200	$220	$270	N/A	$25	$28	$34
TC	TCO Basis Swap (Tier 2)	$125	$138	$169	N/A	$25	$28	$34
PB	PG&E Malin Basis (Tier 1)	$500	$550	$675	N/A	$25	$28	$34
PB	PG&E Malin Basis (Tier 2)	$400	$140	$540	N/A	$25	$28	$34
PB	PG&E Malin Basis (Tier 3)	$250	$275	$338	N/A	$25	$28	$34
PC	PG&E Citygate Basis (Tier 1)	$800	$880	$1,080	N/A	$25	$28	$34
PC	PG&E Citygate Basis (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
PC	PG&E Citygate Basis (Tier 3)	$250	$275	$338	N/A	$25	$28	$34
IK	PG&E Citygate Index (Tier 1)	$2.000	$2,200	$2,700	N/A	$25	$28	$34
IK	PG&E Citygate Index (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IK	PG&E Citygate Index (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
SK	PG&E Citygate Swing	$3,000	$3,300	$4,050	N/A	$100	$110	$135
PD	NGPL Tex/OK Basis (Tier 1)	$600	$660	$810	N/A	$25	$28	$34
PD	NGPL Tex/OK Basis (Tier 2)	$300	$330	$405	N/A	$25	$28	$34
PD	NGPL Tex/OK Basis (Tier 3)	$300	$330	$405	N/A	$25	$28	$34
PD	NGPL Tex/OK Basis (Tier 4)	$300	$330	$405	N/A	$25	$28	$34
PD	NGPL Tex/OK Basis (Tier 6)	$200	$220	$270	N/A	$25	$28	$34
OI	NGPL Tex/OK Index (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
OI	NGPL Tex/OK Index (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
OI	NGPL Tex/OK Index (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
OX	NGPL Tex/OK Swing	$2,000	$2,200	$2,700	N/A	$100	$110	$135
NY	NGPL LA Basis (Tier 1)	$500	$550	$675	N/A	$25	$28	$34
NY	NGPL LA Basis (Tier 2)	$250	$275	$338	N/A	$25	$28	$34
NU	Trunkline, LA Basis (Tier 1)	$75	$83	$101	N/A	$25	$28	$34
NU	Trunkline, LA Basis Basis (Tier 2)	$100	$110	$135	N/A	$25	$28	$34
ND	ANR LA Basis (Tier 1)	$150	$165	$203	N/A	$25	$28	$34
ND	ANR LA Basis (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
NE	ANR OK Basis (Tier 1)	$750	$825	$1,013	N/A	$25	$28	$34
NE	ANR OK Basis (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
IQ	ANR OK Index (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IQ	ANR OK Index (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IQ	ANR OK Index (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
SQ	ANR OK Swing	$2,000	$2,200	$2,700	N/A	$100	$110	$135
NK	Sumas Basis (Tier 1)	$750	$825	$1,013	N/A	$25	$28	$34
NK	Sumas Basis (Tier 2)	$600	$660	$810	N/A	$25	$28	$34
NK	Sumas Basis (Tier 3)	$400	$440	$540	N/A	$25	$28	$34
IU	Sumas Index Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IU	Sumas Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34

IU	Sumas Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
SU	Sumas Swing Swap	$2,000	$2,200	$2,700	N/A	$100	$110	$135
NL	NGPL Mid-Continent Basis (Tier 1)	$600	$660	$810	N/A	$25	$28	$34
NL	NGPL Mid-Continent Basis (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
NL	NGPL Mid-Continent Basis (Tier 3)	$300	$330	$405	N/A	$25	$28	$34
NL	NGPL Mid-Continent Basis (Tier 4)	$300	$330	$405	N/A	$25	$28	$34
NL	NGPL Mid-Continent Basis (Tier 5)	$200	$220	$270	N/A	$25	$28	$34
IW	NGPL Mid-Continent Index (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IW	NGPL Mid-Continent Index (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IW	NGPL Mid-Continent Index (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
PX	NGPL Mid-Continent Swing	$2,000	$2,200	$2,700	N/A	$100	$110	$135
PE	Demarcation Basis Swap (Tier 1)	$600	$660	$810	N/A	$25	$28	$34
PE	Demarcation Basis Swap (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
PE	Demarcation Basis Swap (Tier 3)	$250	$275	$338	N/A	$25	$28	$34
DI	Demarcation Index Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
DI	Demarcation Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
DI	Demarcation Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
DT	Demarcation Swing Swap	$2,000	$2,200	$2,700	N/A	$100	$110	$135
PF	Northern Natural Gas Ventura, Iowa Basis (Tier 1)	$600	$660	$810	N/A	$25	$28	$34
PF	Northern Natural Gas Ventura, Iowa Basis (Tier 2)	$250	$275	$338	N/A	$25	$28	$34
PF	Northern Natural Gas Ventura, Iowa Basis (Tier 3)	$250	$275	$338	N/A	$25	$28	$34
VI	Ventura Natural Gas Index Swap (Tier 1)	$1,200	$1,320	$1,620	N/A	$25	$28	$34
VI	Ventura Natural Gas Index Swap (Tier 2)	$100	$110	$135	N/A	$25	$28	$34
VI	Ventura Natural Gas Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
VS	Ventura Natural Gas Swing Swap	$2,000	$2,200	$2,700	N/A	$100	$110	$135
PG	Dominion Transmission Inc. -- Appalachia Basis (Tier 1)	$250	$275	$338	N/A	$25	$28	$34
PG	Dominion Transmission Inc. -- Appalachia Basis (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IH	Dominion Index Swap (Tier 1)	$1,500	$1,650	$2,025	N/A	$25	$28	$34
IH	Dominion Index Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
IH	Dominion Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
SH	Dominion Swing Swap	$2,000	$2,200	$2,700	N/A	$100	$110	$135
PW	CenterPoint Natural Gas Basis Swap (Tier 1)	$750	$825	$1,013	N/A	$25	$28	$34
PW	CenterPoint Natural Gas Basis Swap (Tier 2)	$400	$440	$540	N/A	$25	$28	$34
II	CenterPoint Natural Gas Index Swap (Tier 1)	$1,200	$1,320	$1,620	N/A	$25	$28	$34
II	CenterPoint Natural Gas Index Swap (Tier 2)	$250	$275	$338	N/A	$25	$28	$34
II	CenterPoint Natural Gas Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
VX	CenterPoint Natural Gas Swing Swap	$2,000	$2,200	$2,700	N/A	$100	$110	$135
DW	Dawn Natural Gas Basis Swap (Tier 1)	$800	$880	$1,080	N/A	$25	$28	$34
DW	Dawn Natural Gas Basis Swap (Tier 2)	$300	$330	$405	N/A	$25	$28	$34
IO	Dawn Natural Gas Index Swap (Tier 1)	$1,200	$1,320	$1,620	N/A	$25	$28	$34
IO	Dawn Natural Gas Index Swap (Tier 2)	$100	$110	$135	N/A	$25	$28	$34
IO	Dawn Natural Gas Index Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
OW	Dawn Natural Gas Swing Swap	$2,000	$2,200	$2,700	N/A	$100	$110	$135
TE	Tetco East LA Basis Swap (Tier 1)	$150	$165	$203	N/A	$25	$28	$34
TE	Tetco East LA Basis Swap (Tier 2)	$75	$83	$101	N/A	$25	$28	$34
TE	Tetco East LA Basis Swap (Tier 3)	$50	$55	$68	N/A	$25	$28	$34
TE	Tetco East LA Basis Swap (Tier 4)	$50	$55	$68	N/A	$25	$28	$34
TE	Tetco East LA Basis Swap (Tier 5)	$50	$55	$68	N/A	$25	$28	$34
TX	Tetco South TX Basis Swap (Tier 1)	$300	$330	$405	N/A	$25	$28	$34
TX	Tetco South TX Basis Swap (Tier 2)	$250	$275	$338	N/A	$25	$28	$34

TX	Tetco South TX Basis Swap (Tier 3)	$200	$220	$270	N/A	$25	$28	$34
TX	Tetco South TX Basis Swap (Tier 4)	$200	$220	$270	N/A	$25	$28	$34
TX	Tetco South TX Basis Swap (Tier 5)	$200	$220	$270	N/A	$25	$28	$34
GL	Columbia Gulf Onshore Basis Swap (Tier 1)	$75	$83	$101	N/A	$25	$28	$34
GL	Columbia Gulf Onshore Basis Swap (Tier 2)	$60	$88	$108	N/A	$25	$28	$34
GL	Columbia Gulf Onshore Basis Swap (Tier 3)	$85	$94	$115	N/A	$25	$28	$34
GL	Columbia Gulf Onshore Basis Swap (Tier 4)	$100	$110	$135	N/A	$25	$28	$34
GL	Columbia Gulf Onshore Basis Swap (Tier 5)	$100	$110	$135	N/A	$25	$28	$34
CZ	Transco Zone 3 Basis Swap (Tier 1)	$150	$165	$203	N/A	$25	$28	$34
CZ	Transco Zone 3 Basis Swap (Tier 2)	$100	$110	$135	N/A	$25	$28	$34
CZ	Transco Zone 3 Basis Swap (Tier 3)	$100	$110	$135	N/A	$25	$28	$34
CZ	Transco Zone 3 Basis Swap (Tier 4)	$100	$110	$135	N/A	$25	$28	$34
CZ	Transco Zone 3 Basis Swap (Tier 5)	$75	$83	$101	N/A	$25	$28	$34
SZ	Sonat Basis Swap (Tier 1)	$250	$275	$338	N/A	$25	$28	$34
SZ	Sonat Basis Swap (Tier 2)	$75	$83	$101	N/A	$25	$28	$34
SZ	Sonat Basis Swap (Tier 3)	$75	$83	$101	N/A	$25	$28	$34
SZ	Sonat Basis Swap (Tier 4)	$200	$220	$270	N/A	$25	$28	$34
SZ	Sonat Basis Swap (Tier 5)	$200	$220	$270	N/A	$25	$28	$34
TR	Transco Zone 4 Basis (Tier 1)	$125	$138	$169	N/A	$25	$28	$34
TR	Transco Zone 4 Basis (Tier 2)	$150	$165	$203	N/A	$25	$28	$34
TR	Transco Zone 4 Basis (Tier 3)	$150	$165	$203	N/A	$25	$28	$34
TR	Transco Zone 4 Basis (Tier 4)	$75	$83	$101	N/A	$25	$28	$34
TR	Transco Zone 4 Basis (Tier 5)	$75	$83	$101	N/A	$25	$28	$34
FP	Florida Gas Zone 3 Basis Swap (Tier 1)	$300	$330	$405	N/A	$25	$28	$34
FP	Florida Gas Zone 3 Basis Swap (Tier 2)	$200	$220	$270	N/A	$25	$28	$34
FP	Florida Gas Zone 3 Basis Swap (Tier 3)	$200	$220	$270	N/A	$25	$28	$34
FP	Florida Gas Zone 3 Basis Swap (Tier 4)	$200	$220	$270	N/A	$25	$28	$34
FP	Florida Gas Zone 3 Basis Swap (Tier 5)	$200	$220	$270	N/A	$25	$28	$34
Crude Oil Markets								
UB	Dated Brent Crude Oil Calendar Swap	$6,000	$6,600	8,100	N/A	$400	$440	$540
CS	WTI Calendar Swap	$7,500	$8,250	$10,125	N/A	$450	$495	$608
DC	Dubai Crude Oil Calendar Swap	$7,500	$8,250	$10,125	N/A	$480	$528	$648
MA	WTI Bow River Swap	$2,400	$2,640	$3,240	N/A	$480	$528	$648
BY	WTI - Brent (ICE) Bullet Swap	$1,800	$1,980	$2,430	N/A	$50	$55	$68
FY	Dated-to-Frontline Brent Swap	$750	$825	$1,013	N/A	$50	$55	$68
BK	WTI - Brent (ICE) Calendar Swap	$1,600	$1,760	$2,160	N/A	$50	$55	$68
DB	Brent - Dubai Swap	$3,500	$3,850	$4,725	N/A	$50	$55	$68
XL	LLS (Platts) Calendar Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
XT	LLS (Platts) Trade Month Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
XA	LLS (Argus) Calendar Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
LI	LLS (Argus) Trade Month Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
MV	Mars (Platts) Calendar Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
MZ	Mars (Platts) Trade Month Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
MX	Mars (Argus) Calendar Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
MQ	Mars (Argus) Trade Month Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
PR	WTS (Platts) Calendar Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
PV	WTS (Platts) Trade Month Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540

XB	WTS (Argus) Calendar Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
AY	WTS (Argus) Trade Month Swap	$3,000	$3,300	$4,050	N/A	$400	$440	$540
WH	LLS (Platts) vs. WTI Spread Calendar Swap	$600	$660	$810	N/A	$100	$110	$135
WI	LLS (Platts) vs. WTI Spread Trade Month Swap	$600	$660	$810	N/A	$100	$110	$135
WJ	LLS (Argus) vs. WTI Spread Calendar Swap	$600	$660	$810	N/A	$100	$110	$135
WK	LLS (Argus) vs. WTI Spread Trade Month Swap	$600	$660	$810	N/A	$100	$110	$135
WL	Mars (Platts) vs. WTI Spread Calendar Swap	$600	$660	$810	N/A	$100	$110	$135
WP	Mars (Platts) vs. WTI Spread Trade Month Swap	$600	$660	$810	N/A	$100	$110	$135
YX	Mars (Argus) vs. WTI Spread Calendar Swap	$600	$660	$810	N/A	$100	$110	$135
YV	Mars (Argus) vs. WTI Spread Trade Month Swap	$600	$660	$810	N/A	$100	$110	$135
PZ	WTS (Platts) vs. WTI Spread Calendar Swap	$600	$660	$810	N/A	$100	$110	$135
XE	WTS (Platts) vs. WTI Spread Trade Month Swap	$600	$660	$810	N/A	$100	$110	$135
FF	WTS (Argus) vs. WTI Spread Calendar Swap	$600	$660	$810	N/A	$100	$110	$135
FH	WTS (Argus) vs. WTI Spread Trade Month Swap	$600	$660	$810	N/A	$100	$110	$135
Petroleum Spread & Product Markets								
YK	Gulf Coast Low Sulfur Diesel (LSD) Crack Spread Swap	$3,500	$3,850	$4,725	N/A	-	-	-
GY	Gulf Coast ULSD Crack Spread Swap	$4,500	$4,950	$6,075	N/A	-	-	-
UW	New York Low Sulfur Diesel (LSD) Crack Spread Swap	$3,500	$3,850	$4,725	N/A	-	-	-
YU	New York ULSD Crack Spread Swap	$3,500	$3,850	$4,725	N/A	-	-	-
YL	Up-Down Gulf Coast LSD vs. NYMEX HO Spread Swap	$1,800	$1,980	$2,430	N/A	-	-	-
LT	Up-Down Gulf Coast ULSD vs. NYMEX HO Spread Swap	$1,500	$1,650	$2,025	N/A	-	-	-
UT	#2 Heating Oil Up-Down Spread Calendar Swap	$1,200	$1,320	$1,620	N/A	$240	$264	$324
MP	NY Harbor Heating Oil Calendar Swap (Tier 1)	$9,000	$9,900	$12,150	N/A	$250	$275	$338
MP	NY Harbor Heating Oil Calendar Swap (Tier 2)	$8,500	$9,350	$11,475	N/A	$150	$165	$203
MP	NY Harbor Heating Oil Calendar Swap (Tier 3)	$7,500	$8,250	$10,125	N/A	$150	$165	$203
MP	NY Harbor Heating Oil Calendar Swap (Tier 4)	$7,000	$7,700	$9,450	N/A	$100	$110	$135
MH	Los Angeles CARB Gasoline Swap	$2,400	$2,640	$3,240	N/A	$480	$528	$648
MF	Gulf Coast #6 Fuel 3.0% Swap	$5,500	$6,050	$7,425	N/A	$480	$528	$648
MM	NY Harbor Residual Fuel 1.0% Swap	$5,000	$5,500	$6,750	N/A	$480	$528	$648
UN	European Naphtha Calendar Swap (Tier 1)	$60,000	$66,000	$81,000	$3,400	$2,400	$2,640	$3,240
UN	European Naphtha Calendar Swap (Tier 2)	$55,000	$60,500	$74,250	N/A	$2,400	$2,640	$3,240
UJ	European Jet Kero NWE Calendar Swap (Northwest Europe)	$60,000	$66,000	$81,000	N/A	$3,400	$3,740	$4,590
UR	European Jet Kero Rotterdam Calendar Swap	$22,000	$24,200	$29,700	N/A	$2,400	$2,640	$3,240
UG	European Gasoil 0.2 Rotterdam Calendar Swap	$40,000	$44,000	$54,000	N/A	$3,400	$3,740	$4,590
UE	European Gasoil 0.2 NWE Calendar Swap (Northwest Europe) — Tier 1	$23,000	$25,300	$31,050	N/A	$2,400	$2,640	$3,240
UE	European Gasoil 0.2 NWE Calendar Swap (Northwest Europe) — Tier 2	$21,000	$23,100	$28,350	N/A	$2,400	$2,640	$3,240
UQ	European Gasoil 0.2 MED Calendar Swap (Mediterranean)	$21,000	$23,100	$28,350	N/A	$2,400	$2,640	$3,240
UP	European ULSD (Diesel) Rotterdam Calendar Swap	$21,000	$23,100	$28,350	N/A	$3,400	$3,740	$4,590
	European ULSD NWE Calendar Swap							

UL	(Northwest Europe)	$21,000	$23,100	$28,350	N/A	$3,400	$3,740	$4,590
UF	European 1% Fuel Oil Calendar Swap (Northwest Europe)	$24,000	$26,400	$32,400	N/A	$3,800	$4,180	$5,130
UH	European 1% Fuel Oil Rotterdam Calendar Swap	$24,000	$26,400	$32,400	N/A	$3,400	$3,740	$4,590
UV	European 3.5% Fuel Oil Rotterdam Calendar Swap	$25,000	$27,500	$33,750	N/A	$3,400	$3,740	$4,590
UI	European 3.5% Fuel Oil MED Calendar Swap (Mediterranean)	$16,000	$17,600	$21,600	N/A	$3,400	$3,740	$4,590
UA	European Singapore Fuel Oil 180cst Calendar Swap	$23,000	$25,300	$31,050	N/A	$2,400	$2,640	$3,240
GS	Gulf Coast Gasoline Calendar Swap	$9,000	$9,900	$12,150	N/A	$500	$550	$675
GP	Gulf Coast Heating Oil Calendar Swap	$1,500	$1,650	$2,025	N/A	$400	$440	$540
GE	Gulf Coast Jet Fuel Calendar Swap	$5,000	$5,500	$6,750	N/A	$400	$440	$540
GZ	European Gasoil Crack Spread Swap	$5,500	$6,050	$7,425	N/A	$250	$275	$338
GG	European Gasoil 0.2 CIF MED Swap	$21,000	$23,100	$28,350	N/A	$3,400	$3,740	$4,590
GT	European Gasoil 10PPM Rdam Barges Swap	$55,000	$60,500	$74,250	N/A	$3,400	$3,740	$4,590
GX	European Gasoil (ICE) Calendar Swap (Tier 1)	$55,000	$60,500	$74,250	N/A			
GX	European Gasoil (ICE) Calendar Swap (Tier 2)	$35,000	$38,500	$47,250	N/A			
GX	European Gasoil (ICE) Calendar Swap (Tier 3)	$30,000	$33,000	$40,500	N/A			
GX	European Gasoil (ICE) Calendar Swap (Tier 4)	$25,000	$27,500	$33,750	N/A			
RG	European Argus Gasoline Crack Spread Swap	$4,000	$4,400	$5,400	N/A	$850	$935	$1,148
EP	European Platts Gasoline MED Crack Spread Swap	$2,650	$2,915	$3,578	N/A	$225	$248	$304
EN	European Naphtha Crack Spread	$3,500	$3,850	$4,725	N/A	$250	$275	$338
ES	European ULSD 50 PPM CIF NWE Swap	$30,000	$33,000	$40,500	N/A	$3,400	$3,740	$4,590
EH	European ULSD 50 PPM CIF MED Swap	$60,000	$66,000	$81,000	N/A	$3,400	$3,740	$4,590
EL	European ULSD 50 PPM FOB MED Swap	$28,000	$30,800	$37,800	N/A	$3,400	$3,740	$4,590
EI	European Gasoil 0.2 Rdam Barges v. Gasoil Futures Swap	$6,000	$6,600	$8,100	N/A	$200	$220	$270
EC	European Gasoil 0.2 CIF NWE v. Gasoil Futures Swap	$2,000	$2,200	$2,700	N/A	$200	$220	$270
EX	European Gasoil 0.2 CIF MED v. Gasoil Futures Swap	$2,750	$3,025	$3,713	N/A	$150	$165	$203
EF	European Gasoil 0.2 FOB MED v. Gasoil Futures Swap	$7,000	$7,700	$9,450	N/A	$150	$165	$203
ET	European Gasoil 10PPM Rdam Barges v. Gasoil Futures Swap	$10,000	$11,000	$13,500	N/A	$150	$165	$203
EY	European ULSD 50PPM CIF NWE v. Gasoil Futures Swap	$8,000	$8,800	$10,800	N/A	$900	$990	$1,215
EE	European ULSD 50PPM CIF MED v. Gasoil Futures Swap	$10,000	$11,000	$13,500	N/A	$600	$660	$810
EO	European ULSD 50PPM FOB MED v. Gasoil Futures Swap	$17,000	$18,700	$22,950	N/A	$600	$660	$810
JC	European Jet CIF NWE v. Gasoil Futures Swap	$20,000	$22,000	$27,000	N/A	$200	$220	$270
TP	Gasoil 10ppm Cargoes CIF NWE v. ICE Gasoil Swap	$15,000	$16,500	$20,250	N/A	$200	$220	$270
JR	European Jet Rdam Barges v. Gasoil Futures Swap	$10,000	$11,000	$13,500	N/A	$150	$165	$203
GA	Singapore Gasoil v. Rdam Gasoil Swap	$4,500	$4,950	$6,075	N/A	$200	$220	$270
HA	Heating Oil Arb Swap: NYMEX HO v. Rdam Gasoil	$1,000	$1,100	$1,350	N/A	$200	$220	$270
FO	3.5% Fuel Oil Rdam Crack Swap	$5,500	$6,050	$7,425	N/A	$350	$385	$473
FI	1% Fuel Oil NWE Crack Spread Swap	$5,500	$6,050	$7,425	N/A	$350	$385	$473
FK	3.5% Fuel Oil Rdam v 3.5% FOB MED Spread Swap	$3,000	$3,300	$4,050	N/A	$350	$385	$473
FL	3.5% Fuel Oil FOB MED Crack Spread Swap	$3,000	$3,300	$4,050	N/A	$200	$220	$270
	New York Harbor Conventional							

RZ	Gasoline vs. RBOB Swap Contract	$2,000	$2,000	$2,700	N/A	$240	$364	$324
LW	Gulf Coast Low Sulfur Diesel (LSD) Swap	$8,000	$8,800	$10,800	N/A	*	*	*
LY	Gulf Coast Ultra Low Sulfur Diesel (ULSD) Swap	$8,000	$8,800	$10,800	N/A	*	*	*
YW	New York Low Sulfur Diesel (LSD) Swap	$4,250	$4,675	$5,738	N/A	*	*	*
YS	New York Ultra Low Sulfur Diesel (ULSD) Swap	$4,250	$4,675	$5,738	N/A	*	*	*
AW	Gulf Coast Gasoline (Argus) Calendar Swap	$6,000	$6,600	$8,100	N/A	$500	$550	$675
AJ	Gulf Coast ULSD (Argus) Calendar Swap	$4,500	$4,950	$6,075	N/A	$480	$528	$648
AF	Gulf Coast Jet (Argus) Calendar Swap	$3,500	$3,850	$4,725	N/A	$400	$440	$540
LX	Los Angeles CARB Diesel (OPIS) Outright Swap	$4,000	$4,400	$5,400	N/A	$480	$528	$648
LL	Los Angeles Jet (OPIS) Outright Swap	$4,000	$4,400	$5,400	N/A	$400	$440	$540
PT	Mt Belvieu Propane (OPIS) Swap	$5,000	$5,500	$6,750	N/A	$250	$275	$338
RY	RBOB (Platts) Calendar Swap	$4,500	$4,950	$6,075	N/A	$250	$275	$338
BG	European Gasoil Bullet Swap	$60,000	$66,000	$81,000	N/A	$2,000	$2,200	$2,700
PS	European Propane CIF ARA (Argus) Swap	$37,000	$40,700	$49,950	N/A	$3,800	$4,180	$5,130
JA	Japan C&F Naphtha (Platts) Swap	$60,000	$66,000	$81,000	N/A	$3,800	$4,180	$5,130
UZ	Gasoline Up-Down (Argus) Swap	$1,500	$1,650	$2,025	N/A	$240	$264	$324
US	ULSD Up-Down (Argus) Swap	$2,000	$2,200	$2,700	N/A	$240	$264	$324
JU	Jet Up-Down (Argus)	$3,000	$3,300	$4,050	N/A	$240	$264	$324
RI	RBOB (Platts) vs. NYMEX RBOB Spread Swap	$2,000	$2,200	$2,700	N/A	$240	$264	$324
UY	NY ULSD (Platts) vs. NYMEX HO Spread Swap	$2,000	$2,200	$2,700	N/A	$240	$264	$324
JL	Los Angeles CARBOB (OPIS) Spread Swap	$4,000	$4,400	$5,400	N/A	$240	$264	$324
JS	Los Angeles Jet (OPIS) Spread Swap	$4,000	$4,400	$5,400	N/A	$240	$264	$324
KL	Los Angeles CARB Diesel (OPIS) Spread Swap	$3,000	$3,300	$4,050	N/A	$240	$264	$324
CF	Gulf Coast ULSD Crack Spread (Argus) Swap	$3,000	$3,300	$4,050	N/A	$480	$528	$648
CK	Gulf Coast Gasoline Crack Spread (Argus) Swap	$4,500	$4,950	$6,075	N/A	$240	$264	$324
JB	Japan C&F Naphtha Crack Spread (Platts)	$4,500	$4,950	$6,075	N/A	$250	$275	$338
CU	Chicago Ethanol (Platts) Swap	$3,500	$3,850	$4,725	N/A	$400	$440	$540
EZ	New York Ethanol (Platts) Swap	$5,000	$5,500	$6,750	N/A	$400	$440	$540
Crude Oil & Petroleum Products Markets								
HK	NY Harbor Heating Oil Crack Spread Calendar Swap (Tier 1)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
HK	NY Harbor Heating Oil Crack Spread Calendar Swap (Tier 2)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
HK	NY Harbor Heating Oil Crack Spread Calendar Swap (Tier 3)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
HK	NY Harbor Heating Oil Crack Spread Calendar Swap (Tier 4)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
RH	RBOB vs. Heating Oil Swap	$7,000	$7,700	$9,450	N/A	$100	$110	$135
RL	RBOB Calendar Swap (Tier 1)	$7,500	$8,250	$10,125	N/A	$200	$220	$270
RL	RBOB Calendar Swap (Tier 2)	$7,000	$7,700	$9,450	N/A	$200	$220	$270
RL	RBOB Calendar Swap (Tier 3)	$6,250	$6,875	$8,438	N/A	$150	$165	$203
RL	RBOB Calendar Swap (Tier 4)	$6,000	$6,600	$8,100	N/A	$150	$165	$203
RM	RBOB Crack Spread Swap (Tier 1)	$2,950	$3,245	$3,983	N/A	$100	$110	$135
RM	RBOB Crack Spread Swap (Tier 2)	$2,850	$3,135	$3,848	N/A	$100	$110	$135
RM	RBOB Crack Spread Swap (Tier 3)	$2,700	$2,970	$3,645	N/A	$100	$110	$135
RM	RBOB Crack Spread Swap (Tier 4)	$2,650	$2,915	$3,578	N/A	$100	$110	$135
RV	RBOB Up-Down Calendar Swap	$1,500	$1,650	$2,025	N/A	$100	$110	$135
RD	US Gulf Coast #2 HO Crack Spread Calendar Swap	$3,500	$3,850	$4,725	N/A	$240	$264	$324
RU	US Gulf Coast Unl. 87 Crack Spread Calendar Swap	$4,500	$4,950	$6,075	N/A	$240	$264	$324

MF	Gulf Coast #6 Fuel 3.0% Sulfur Swap	$5,000	$5,500	$6,750	N/A	$480	$528	$648
MG	Gulf Coast #6 Fuel Oil Crack Swap	$5,000	$5,500	$6,750	N/A	$480	$528	$648
ML	NY Harbor Residual Fuel Crack Swap	$3,500	$3,850	$4,725	N/A	$480	$528	$648
MK	NY Harbor LS Diesel vs. NYMEX #2 HO Spread Swap	$600	$660	$810	N/A	$240	$264	$324
MD	Gulf Coast Gas vs. Gulf Coast HO Spread Swap	$5,000	$5,500	$6,750	N/A	$240	$264	$324
ME	Gulf Coast Jet vs. NYMEX #2 HO Spread Swap	$1,500	$1,650	$2,025	N/A	$240	$264	$324
MQ	LA Jet Fuel vs. NYMEX #2 HO Spread Swap	$1,000	$1,100	$1,350	N/A	$240	$264	$324
EU	European Unleaded Gasoline 50ppm Swap	$33,750	$37,125	$45,563	N/A	$2,000	$2,200	$2,700
AR	Argus NWE Gasoline Swap (Tier 1)	$60,000	$66,000	$81,000	N/A	$2,000	$2,200	$2,700
AR	Argus NWE Gasoline Swap (Tier 2)	$50,000	$55,000	$67,500	N/A	$2,000	$2,200	$2,700
EW	East/West Fuel Oil Spread Swap (Tier 1)	$10,000	$11,000	$13,500	N/A	$1,000	$1,100	$1,350
EW	East/West Fuel Oil Spread Swap (Tier 2)	$5,000	$5,500	$6,750	N/A	$1,000	$1,100	$1,350
FS	High-Low Sulfur Fuel Oil Spread Swap	$6,000	$6,600	8,100	N/A	$1,000	$1,100	$1,350
SD	Singapore Fuel Oil Spread Swap	$5,000	$5,500	$6,750	N/A	$340	$374	$459
SE	Singapore 380cst Fuel Oil Swap	$25,000	$27,500	$33,750	N/A	$2,400	$2,640	$3,240
SG	Singapore Gasoil Swap	$7,000	$7,700	$9,450	N/A	$400	$440	$540
KS	Singapore Jet Kerosene Swap	$5,000	$5,500	$6,750	N/A	$250	$275	$338
SP	Singapore Naphtha Swap	$6,000	$6,600	8,100	N/A	$250	$275	$338
HZ	Singapore 380cst Fuel Oil	$2,500	$2,750	$3,375	$3,000	$240	$264	$324
RK	Singapore Jet Regrade: Jet Kero vs Gasoil Swap	$2,000	$2,200	$2,700	N/A	$200	$220	$270
Freight Futures Markets								
TG	Tanker Route TC1 Ras Tanura to Yokohama	$1,500	$1,650	$2,025	N/A	$200	$220	$270
TM	Tanker Route TC2 Europe to U.S. Atlantic Coast (Tier 1)	$4,000	$4,400	$5,400	N/A	$150	$165	$203
TM	Tanker Route TC2 Europe to U.S. Atlantic Coast (Tier 2)	$2,000	$2,200	$2,700	N/A	$150	$165	$203
TJ	Tanker Route TC4 Singapore to Japan	$1,000	$1,100	$1,350	N/A	$150	$165	$203
TH	Tanker Route TC5 Ras Tanura to Yokohama	$1,750	$1,925	$2,363	N/A	$200	$220	$270
TL	Tanker Route TD3 Middle Eastern Gulf to Japan	$2,000	$2,200	$2,700	N/A	$100	$110	$135
TI	Tanker Route TD5 West Africa to U.S. Atlantic Coast	$2,000	$2,200	$2,700	N/A	$150	$165	$203
TK	Tanker Route TD7 North Sea to Europe	$700	$770	$945	N/A	$50	$55	$68
TN	Tanker Route TD9 Caribbean to U.S. Gulf	$750	$825	$1,013	N/A	$200	$220	$270
TO	Tanker Route TD10D Caribbean to U.S. Atlantic Coast	$750	$825	$1,013	N/A	$150	$165	$203
Emissions Futures Markets								
RN	Nitrogen Oxide (NOX) Emissions	$3,000	$3,300	$4,050	N/A	$300	$330	$405
RO	Banked NOX Emissions Allowance	$2,000	$2,200	$2,700	N/A	$500	$550	$675
RP	One-Year Forward NOX Emissions Allowance	$2,000	$2,200	$2,700	N/A	$300	$330	$405
RQ	Two-Year Forward NOX Emissions Allowance	$2,000	$2,200	$2,700	N/A	$300	$330	$405
RR	Three-Year Forward NOX Emissions Allowance	$2,000	$2,200	$2,700	N/A	$500	$550	$675
RS	Sulfur Dioxide (SO_2) Emissions	$6,000	$6,600	$8,100	N/A	$500	$550	$675
Electricity Markets								
JM	PJM Financially Settled Peak Monthly (Tier 1)	$10,000	$11,000	$13,500	N/A	$250	$275	$338
JM	PJM Financially Settled Peak Monthly (Tier 2)	$7,500	$8,250	$10,125	N/A	$250	$275	$338

JM	PJM Financially Settled Peak Monthly (Tier 3)	$6,000	$6,600	$8,100	N/A	$250	$275	$338
JM	PJM Financially Settled Peak Monthly (Tier 4)	$4,500	$4,950	$6,075	N/A	$250	$275	$338
JM	PJM Financially Settled Peak Monthly (Tier 5)	$3,500	$3,850	$4,725	N/A	$250	$275	$338
JM	PJM Financially Settled Peak Monthly (Tier 6)	$3,000	$3,300	$4,050	N/A	$250	$275	$338
JM	PJM Financially Settled Peak Monthly (Tier 7)	$4,000	$4,400	$5,400	N/A	$250	$275	$338
JM	PJM Financially Settled Peak Monthly (Tier 8)	$3,500	$3,850	$4,725	N/A	$250	$275	$338
JP	PJM Financially Settled Off-Peak LMP (Tier 1)	$6,000	$6,600	$8,100	N/A	$500	$550	$675
JP	PJM Financially Settled Off-Peak LMP (Tier 2)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
JP	PJM Financially Settled Off-Peak LMP (Tier 3)	$2,500	$2,750	$3,375	N/A	$100	$110	$135
JP	PJM Financially Settled Off-Peak LMP (Tier 4)	$2,500	$2,750	$3,375	N/A	$100	$110	$135
JW	PJM Financially Settled Weekly	$4,000	$4,400	$5,400	N/A	N/A	N/A	N/A
JD	PJM Financially Settled Daily	$3,000	$3,300	$4,050	N/A	N/A	N/A	N/A
KA	NYISO A Peak (Tier 1)	$2,500	$2,750	$3,375	$3,500	$500	$550	$675
KA	NYISO A Peak (Tier 2)	$3,000	$3,300	$4,050	$3,500	$100	$110	$135
KA	NYISO A Peak (Tier 3)	$2,500	$2,750	$3,375	$3,500	$100	$110	$135
KA	NYISO A Peak (Tier 4)	$2,000	$2,200	$2,700	$3,500	$100	$110	$135
KB	NYISO A Off-Peak (Tier 1)	$4,500	$4,950	$6,075	N/A	$500	$550	$675
KB	NYISO A Off-Peak (Tier 2)	$3,500	$3,850	$4,725	N/A	$100	$110	$135
KB	NYISO A Off-Peak (Tier 3)	$4,500	$4,950	$6,075	N/A	$100	$110	$135
KB	NYISO A Off-Peak (Tier 4)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
AN	NYISO A Daily - Peak	$3,000	$3,300	$4,050	N/A	N/A	N/A	N/A
KG	NYISO G Peak (Tier 1)	$2,500	$2,750	$3,375	$3,500	$500	$550	$675
KG	NYISO G Peak (Tier 2)	$3,000	$3,300	$4,050	$3,500	$100	$110	$135
KG	NYISO G Peak (Tier 3)	$3,000	$3,300	$4,050	$3,500	$100	$110	$135
KG	NYISO G Peak (Tier 4)	$3,000	$3,300	$4,050	$3,500	$100	$110	$135
KH	NYISO G Off-Peak (Tier 1)	$5,000	$5,500	$6,750	N/A	$500	$550	$675
KH	NYISO G Off-Peak (Tier 2)	$3,500	$3,850	$4,725	N/A	$100	$110	$135
KH	NYISO G Off-Peak (Tier 3)	$4,500	$4,950	$6,075	N/A	$100	$110	$135
KH	NYISO G Off-Peak (Tier 4)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
GN	NYISO G Daily - Peak	$3,000	$3,300	$4,050	N/A	N/A	N/A	N/A
KJ	NYISO J Peak (Tier 1)	$3,000	$3,300	$4,050	$3,500	$500	$550	$675
KJ	NYISO J Peak (Tier 2)	$3,000	$3,300	$4,050	$3,500	$100	$110	$135
KJ	NYISO J Peak (Tier 3)	$3,000	$3,300	$4,050	$3,500	$100	$110	$135
KJ	NYISO J Peak (Tier 4)	$3,000	$3,300	$4,050	$3,500	$100	$110	$135
KK	NYISO J Off-Peak (Tier 1)	$5,000	$5,500	$6,750	N/A	$500	$550	$675
KK	NYISO J Off-Peak (Tier 2)	$3,500	$3,850	$4,725	N/A	$100	$110	$135
KK	NYISO J Off-Peak (Tier 3)	$3,500	$3,850	$4,725	N/A	$100	$110	$135
KK	NYISO J Off-Peak (Tier 4)	$3,000	$3,300	$4,050	N/A	$100	$110	$135
JN	NYISO J Daily - Peak	$3,000	$3,300	$4,050	N/A	N/A	N/A	N/A
NI	ISO New England Peak (Tier 1)	$7,000	$7,700	$9,450	N/A	$500	$550	$675
NI	ISO New England Peak (Tier 2)	$8,000	$8,800	$10,800	N/A	$100	$110	$135
NI	ISO New England Peak (Tier 3)	$9,000	$9,900	$12,150	N/A	$100	$110	$135
NI	ISO New England Peak (Tier 4)	$6,000	$6,600	$8,100	N/A	$100	$110	$135
KI	ISO New England Off-Peak LMP (Tier 1)	$5,000	$5,500	$6,750	N/A	$500	$550	$675
KI	ISO New England Off-Peak LMP (Tier 2)	$3,500	$3,850	$4,725	N/A	$100	$110	$135
KI	ISO New England Off-Peak LMP (Tier 3)	$4,500	$4,950	$6,075	N/A	$100	$110	$135
KI	ISO New England Off-Peak LMP (Tier 4)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
CE	ISO New England LMP Daily - Peak	$1,500	$1,650	$2,025	N/A	N/A	N/A	N/A
UM	Northern Illinois Hub Peak Monthly (Tier 1)	$10,000	$11,000	$13,500	N/A	$500	$550	$675

UM	Northern Illinois Hub Peak Monthly (Tier 2)	$6,000	$6,600	$8,100	N/A	$100	$110	$135
UM	Northern Illinois Hub Peak Monthly (Tier 3)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
UM	Northern Illinois Hub Peak Monthly (Tier 4)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
UO	Northern Illinois Off-Peak Monthly (Tier 1)	$4,000	$4,400	$5,400	N/A	$500	$550	$675
UO	Northern Illinois Off-Peak Monthly (Tier 2)	$1,500	$1,650	$2,025	N/A	$100	$110	$135
UO	Northern Illinois Off-Peak Monthly (Tier 3)	$1,500	$1,650	$2,025	N/A	$100	$110	$135
UO	Northern Illinois Off-Peak Monthly (Tier 4)	$1,500	$1,650	$2,025	N/A	$100	$110	$135
UD	Northern Illinois Hub Peak Daily Electricity Futures	$2,500	$2,750	$3,375	N/A	N/A	N/A	N/A
VM	AEP-Dayton Hub Peak Monthly (Tier 1)	$10,000	$11,000	$13,500	N/A	$500	$550	$675
VM	AEP-Dayton Hub Peak Monthly (Tier 2)	$6,000	$6,600	$8,100	N/A	$100	$110	$135
VM	AEP-Dayton Hub Peak Monthly (Tier 3)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
VM	AEP-Dayton Hub Peak Monthly (Tier 4)	$4,000	$4,400	$5,400	N/A	$100	$110	$135
VP	AEP-Dayton Off-Peak Monthly (Tier 1)	$3,500	$3,850	$4,725	N/A	$500	$550	$675
VP	AEP-Dayton Off-Peak Monthly (Tier 2)	$2,500	$2,750	$3,375	N/A	$100	$110	$135
VP	AEP-Dayton Off-Peak Monthly (Tier 3)	$2,500	$2,750	$3,375	N/A	$100	$110	$135
VP	AEP-Dayton Off-Peak Monthly (Tier 4)	$1,500	$1,650	$2,025	N/A	$100	$110	$135
VD	AEP-Dayton Hub Daily Swap Futures	$3,000	$3,300	$4,050	N/A	N/A	N/A	N/A
DO	Dow Jones Mid-Columbia Electricity Price Index Futures (Tier 1)	$8,000	$8,800	$10,800	N/A	$500	$550	$675
DO	Dow Jones Mid-Columbia Electricity Price Index Futures (Tier 2)	$8,000	$8,800	$10,800	N/A	$100	$110	$135
DO	Dow Jones Mid-Columbia Electricity Price Index Futures (Tier 3)	$8,000	$8,800	$10,800	N/A	$100	$110	$135
DO	Dow Jones Mid-Columbia Electricity Price Index Futures (Tier 4)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
DP	Dow Jones Palo Verde Electricity Price Index Futures (Tier 1)	$8,000	$8,800	$10,800	N/A	$500	$550	$675
DP	Dow Jones Palo Verde Electricity Price Index Futures (Tier 2)	$8,000	$8,800	$10,600	N/A	$100	$110	$135
DP	Dow Jones Palo Verde Electricity Price Index Futures (Tier 3)	$8,000	$8,800	$10,800	N/A	$100	$110	$135
DP	Dow Jones Palo Verde Electricity Price Index Futures (Tier 4)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
DN	Dow Jones North Path-15 Electricity Price Index Futures (Tier 1)	$8,000	$8,800	$10,800	N/A	$500	$550	$675
DN	Dow Jones North Path-15 Electricity Price Index Futures (Tier 2)	$8,000	$8,800	$10,800	N/A	$100	$110	$135
DN	Dow Jones North Path-15 Electricity Price Index Futures (Tier 3)	$8,000	$8,800	$10,800	N/A	$100	$110	$135
DN	Dow Jones North Path-15 Electricity Price Index Futures (Tier 4)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
DV	Dow Jones South Path-15 Electricity Price Index Futures (Tier 1)	$10,000	$11,000	$13,500	N/A	$500	$550	$675
DV	Dow Jones South Path-15 Electricity Price Index Futures (Tier 2)	$9,000	$9,900	$12,150	N/A	$100	$110	$135
DV	Dow Jones South Path-15 Electricity Price Index Futures (Tier 3)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
DV	Dow Jones South Path-15 Electricity Price Index Futures (Tier 4)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
EM	Cinergy Hub Calendar-Month LMP Swap (Tier 1)	$2,500	$2,750	$3,375	N/A	$500	$550	$675
EM	Cinergy Hub Calendar-Month LMP Swap (Tier 2)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
EM	Cinergy Hub Calendar-Month LMP Swap (Tier 3)	$6,500	$7,150	$8,775	N/A	$100	$110	$135
EM	Cinergy Hub Calendar-Month LMP Swap (Tier 4)	$5,000	$5,500	$6,750	N/A	$100	$110	$135
	Cinergy Hub Off-Peak LMP Swap (Tier							

EJ	1)	$3,000	$3,300	$4,050	N/A	$500	$550	$675
EJ	Cinergy Hub Off-Peak LMP Swap (Tier 2)	$2,500	$2,750	$3,375	N/A	$100	$110	$135
EJ	Cinergy Hub Off-Peak LMP Swap (Tier 3)	$2,500	$2,750	$3,375	N/A	$100	$110	$135
EJ	Cinergy Hub Off-Peak LMP Swap (Tier 4)	$1,500	$1,650	$2,025	N/A	$100	$110	$135
CC	Cinergy Hub LMP Swap (Daily Peak)	$1,000	$1,100	$1,350	N/A	N/A	N/A	N/A
HM	Michigan Hub Calendar-Month LMP Swap	$4,500	$4,950	$6,075	N/A	$1,200	$1,320	$1,620
HJ	Michigan Hub Off-Peak LMP Swap	$3,500	$3,850	$4,725	N/A	$1,500	$1,650	$2,025
OM	MISO Illinois Hub Calendar-Month LMP Swap	$3,500	$3,850	$4,725	N/A	$1,200	$1,320	$1,620
OJ	MISO Illinois Hub Off-Peak LMP Swap	$2,500	$2,750	$3,375	N/A	$1,000	$1,100	$1,350
LM	Minnesota Hub Calendar-Month LMP Swap	$3,500	$3,850	$4,725	N/A	$1,800	$1,980	$2,430
LJ	Minnesota Hub Off-Peak LMP Swap	$4,500	$4,950	$6,075	N/A	$2,500	$2,750	$3,375
VC	ERCOT Sellers Choice Calendar Day Peak Swap (Platts Megawatt Daily) Contract	$1,500	$1,650	$2,025	N/A	$250	$275	$338
HE	ERCOT Houston Calendar Day Peak Swap (Platts Megawatt Daily) Contract	$2,500	$2,750	$3,375	N/A	$250	$275	$338
MC	ERCOT North Calendar Day Peak Swap (Platts Megawatt Daily) Contract	$2,000	$2,200	$2,700	N/A	$250	$275	$338
VY	ERCOT Hub Average MCPE Trading Hub Calendar Day Peak Swap Contract	$2,000	$2,200	$2,700	N/A	$250	$275	$338
HY	ERCOT Houston MCPE Trading Hub Calendar Day Peak Swap Contract	$3,000	$3,300	$4,050	N/A	$250	$275	$338
MY	ERCOT North MCPE Trading Hub Calendar Day Peak Swap Contract	$2,500	$2,750	$3,375	N/A	$250	$275	$338
VT	ERCOT Sellers Choice Peak Swap (Platts Megawatt Daily) Contract	$6,000	$6,600	$8,100	N/A	$250	$275	$338
HT	ERCOT Houston Peak Swap (Platts Megawatt Daily) Contract	$7,000	$7,700	$9,450	N/A	$250	$275	$338
MT	ERCOT North Peak Swap (Platts Megawatt Daily) Contract	$7,000	$7,700	$9,450	N/A	$250	$275	$338
VN	ERCOT Hub Average MCPE Trading Hub Peak Swap Contract	$5,000	$5,500	$6,750	N/A	$250	$275	$338
HN	ERCOT Houston MCPE Trading Hub Peak Swap Contract	$7,500	$8,250	$10,125	N/A	$250	$275	$338
MN	ERCOT North MCPE Trading Hub Peak Swap Contract	$7,500	$8,250	$10,125	N/A	$250	$275	$338

Notes

1	The additional spot month assessment is applied in two increments. First, $100 on positions at the close of business on the business day preceding termination. Second, an additional $2,900 on positions at the close of business on the day of termination.
2	The additional spot month assessment is effective on the first business day of trading for the current delivery month.
3	For cleared contracts, the additional spot month assessment is effective on the day submission deadline terminates.
4	For traded contracts, the additional spot month assessment is effective as of the close of business one day prior to the last trading day.
5	The spot month assessment will take place in two increments. First, $100 on positions at the close of business on the day preceding termination. Second, the remaining of the spot assessment on positions at the close of business on the day after termination.

Tier Requirements: *Outright Margins*, *Intra-Commodity Spread Margins*

†	Outright Margin Tiers	
	2 Tiers	Tier 1: 1st nearby month (spot month) Tier 2: 2nd nearby and Greater
	3 Tiers	Tier 1: 1st through 2nd nearby month Tier 2: 3rd through 5th nearby month Tier 3: Greater than 5th nearby month
	3 Tiers *(Natural Gas Index Swaps)*	Tier 1: 1st through 2nd nearby month Tier 2: 3rd nearby month Tier 3: 4th nearby and Greater
	4 Tiers *(RB, RL, RT, QU)*	Tier 1: 1st nearby month Tier 2: 2nd through 4th nearby month Tier 3: 5th through 11th nearby month Tier 4: Greater than 11th nearby month

4 Tiers	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 6th nearby month Tier 3: 7th through 12th nearby month Tier 4: Greater than 12th nearby month
4 Tiers *(HO, QH, HK, MP, BH)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd nearby month Tier 3: 3rd through 11th nearby month Tier 4: Greater than 11th nearby month
5 Tiers	Tier 1: 1st nearby month (spot month) Tier 2: 2nd nearby month Tier 3: 3rd through 6th nearby month Tier 4: 7th through 12th nearby month Tier 5: Greater than 12th nearby month
5 Tiers *(CI, NR)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 6th nearby month Tier 3: 7th through 9th nearby month Tier 4: 10th through 16th nearby month Tier 5: Greater than 16th nearby month
5 Tiers *(NV, TA)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd nearby month Tier 3: 3rd through 4th nearby month Tier 4: 5th through 11th nearby month Tier 5: Greater than 11th nearby month
5 Tiers *(NX, NZ)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 5th nearby month Tier 3: 6th through 10th nearby month Tier 4: 11th through 17th nearby month Tier 5: Greater than 17th nearby month
5 Tiers *(SZ)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd nearby month Tier 3: 3rd through 4th nearby month Tier 4: 5th through 9th nearby month Tier 5: Greater than 9th nearby month
8 Tiers *(JM)*	Tier 1: 1st nearby month Tier 2: 2nd through 4th nearby month Tier 3: 5th through 6th nearby month Tier 4: 7th through 8th nearby month Tier 5: 9th through 10th nearby month Tier 6: 11th through 12th nearby month Tier 7: 13th through 16th nearby month Tier 8: Greater than 16th nearby month
9 Tiers *(HH, HP, NG, NN, NP, QG)*	Tier 1: 1st nearby month Tier 2: 2nd nearby month Tier 3: 3rd through 4th nearby month Tier 4: 5th through 9th nearby month Tier 5: 10th through 16th nearby month Tier 6: 17th through 21st nearby month Tier 7: 22nd through 33rd nearby month Tier 8: 34th through 45th nearby month Tier 9: Greater than 45th nearby month
Intra-Commodity Spread Tiers	
4 Tiers *(HK)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd nearby month Tier 3: 3rd through 11th nearby month Tier 4: Greater than 11th nearby month
4 Tiers *(GX)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 6th nearby month Tier 3: 7th through 11th nearby month Tier 4: Greater than 11th nearby month
4 Tiers *(CL, BB, CS, WS)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 18th nearby month Tier 3: 19th through 42nd nearby month Tier 4: Greater than 42nd nearby month
4 Tiers *(HO, HK, MP, BH, QH)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 8th nearby month Tier 3: 9th through 12th nearby month Tier 4: Greater than 12th nearby month
4 Tiers *(RB, RL, RM, RT, OU)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 4th nearby month Tier 3: 5th through 11th nearby month Tier 4 Greater than 11th nearby month
5 Tiers *(NX, NZ)*	Tier 1: 1st nearby month (spot month) Tier 2: 2nd through 5th nearby month Tier 3: 6th through 10th nearby month Tier 4: 11th through 17th nearby month Tier 5: Greater than 17th nearby month

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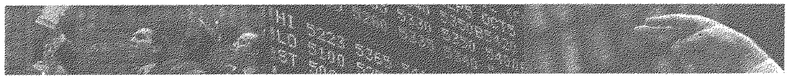
New York Mercantile Exchange
Futures Margins Overview

Presented to US Senate Staff Members
April 9 , 2008, by:

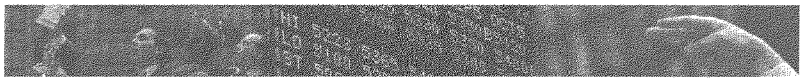
Arthur McCoy-Sr. Vice President Compliance & Risk Management
Brian J. Regan-Sr. Vice President and Counsel
De'Ana Dow –Sr. Vice President and Chief Legislative Counsel



Unique Role Of Futures Markets

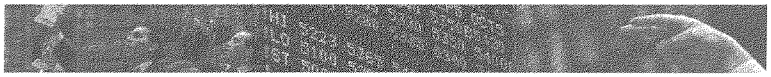
- *Unlike securities markets, which exist to facilitate capital formation, futures markets historically have served two principal functions:*
    - *Price Discovery*
    - *Hedging of Market Price Risk*

A standard feature of futures trading is the shifting or transfer of price risk in volatile commodities.



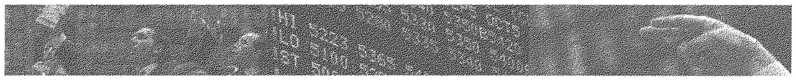
Unique Characteristics Of Futures Contracts

- Legally Binding contract between two parties to buy or sell an underlying product (ie: Crude Oil) at a future date.
- A futures contract is not an asset, as there is no ownership of the underlying product.
- By comparison, a securities transaction results in ownership of an asset (share of stock) and title to the stock passes upon settlement of the trade.
- For contracts with physical delivery (e.g.: Crude Oil), two parties may determine to participate in delivery upon the expiration of the futures contract.
- If physical delivery occurs, the Buyer is required to post full contract value.
- Futures contracts may be extinguished by obtaining an offsetting position, e.g., a long buy position is offset by purchasing a short sell position.
- Futures contracts have a limited life span.
- One day settlement period.



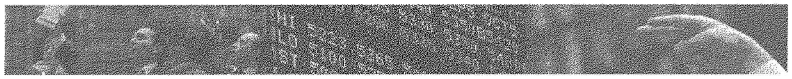
Futures Margin Highlights

- *Futures margin is the amount of money deposited by both buyers and sellers of futures contracts to ensure performance against the positions in their account.*
- *Futures margin is not a down payment against the purchase price of the underlying product.*
- *It represents a good faith deposit or performance bond to make certain that adequate funds are available in each customer's account to properly settle the trade when it is liquidated.*
- *These deposits are intended to cover the financial risk associated with maintaining a futures portfolio.*



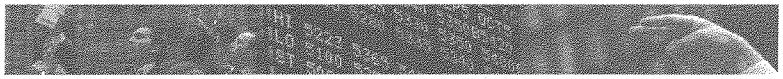
Securities Margins

- *In securities markets, margins comprise the difference between the market value of the stock and the amount being loaned to the customer by the broker.*



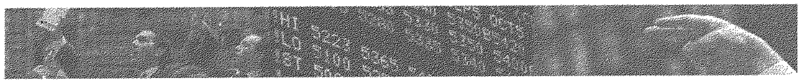
Setting Margin Rates

- Margin rates are set on a product by product basis.
- The objective is to establish rates that protect the Exchange and it's participants from loss caused by price volatility.
- The rates are intended to cover 99% of a likely one day price move.
- Rates are a direct function of a products price volatility.
- Use standard "VAR" formula to calculate volatilities.
- Implied volatility is derived from 1st ATM option, or if no option, 20 days of historical prices.
- This analysis is conducted on a daily basis by NYMEX staff with changes approved by the President.



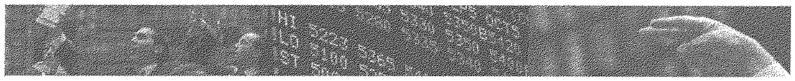
The Role Of The Speculator

- Accept price risk which is transferred by other market participants such as commercials.
- Provides liquidity in markets.
- In accepting price risk, the speculator also accepts the financial benefit or harm (loss) associated with this risk



Unintended Consequences Of Dismantling Sound Proven Margin Policies

- *Cash/Liquidity crisis for market participants.*
- *Decrease in liquidity and an associated increase in volatility.*
- *Futures business does not go away, but moves offshore hurting US futures industry.*



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CRUDE OIL, LIGHT SWEET - NEW YORK MERCANTILE EXCHANGE                                                       Code-067651
Commitments of Traders - Futures Only, April 29, 2008
------------------------------------------------------------------------------------------------------------------------
      :  Total  :                       Reportable Positions                                     :  Nonreportable
      :-------------------------------------------------------------------------------------------    Positions
      :  Open   :          Non-Commercial         :     Commercial      :        Total          :
      : Interest :  Long   :  Short  : Spreading:  Long   :  Short   :   Long   :  Short    :   Long    :  Short
------------------------------------------------------------------------------------------------------------------------
      :          : (CONTRACTS OF 1,000 BARRELS)                                                  :
      :          :                                                                               :
All   : 1,365,456:  241,402   188,091   210,103   837,784   875,113 1,289,289  1,273,307:    76,167     92,149
Old   : 1,365,456:  241,402   188,091   210,103   837,784   875,113 1,289,289  1,273,307:    76,167     92,149
Other:          0:        0         0         0         0         0         0          0:         0          0
      :          :                                                                               :
      :          :          Changes in Commitments from: April 22, 2008                         :
      :    28,401:    1,410    18,661    10,360     4,959     1,827    16,729     30,848:    11,672     -2,447
      :          :                                                                               :
      :          :     Percent of Open Interest Represented by Each Category of Trader         :
All   :     100.0:     17.7      13.8      15.4      61.4      64.1      94.4       93.3:       5.6        6.7
Old   :     100.0:     17.7      13.8      15.4      61.4      64.1      94.4       93.3:       5.6        6.7
Other:      100.0:      0.0       0.0       0.0       0.0       0.0       0.0        0.0:       0.0        0.0
      :          :                                                                               :
      :# Traders :               Number of Traders in Each Category                              :
All   :       328:       91       121       130        88       100       263        273:
Old   :       328:       91       121       130        88       100       263        273:
Other:          0:        0         0         0         0         0         0          0:
      :----------------------------------------------------------------------------------------------
      :              Percent of Open Interest Held by the Indicated Number of the Largest Traders
      :                              By Gross Position                    By Net Position
      :                 4 or Less Traders     8 or Less Traders     4 or Less Traders     8 or Less Traders
      :                   Long:     Short       Long      Short:      Long      Short       Long      Short
      :----------------------------------------------------------------------------------------------
All   :                   28.5      25.6       40.3      35.6       13.3      10.5       20.1      15.5
Old   :                   28.5      25.6       40.3      35.6       13.3      10.5       20.1      15.5
Other:                     0.0       0.0        0.0       0.0        0.0       0.0        0.0       0.0
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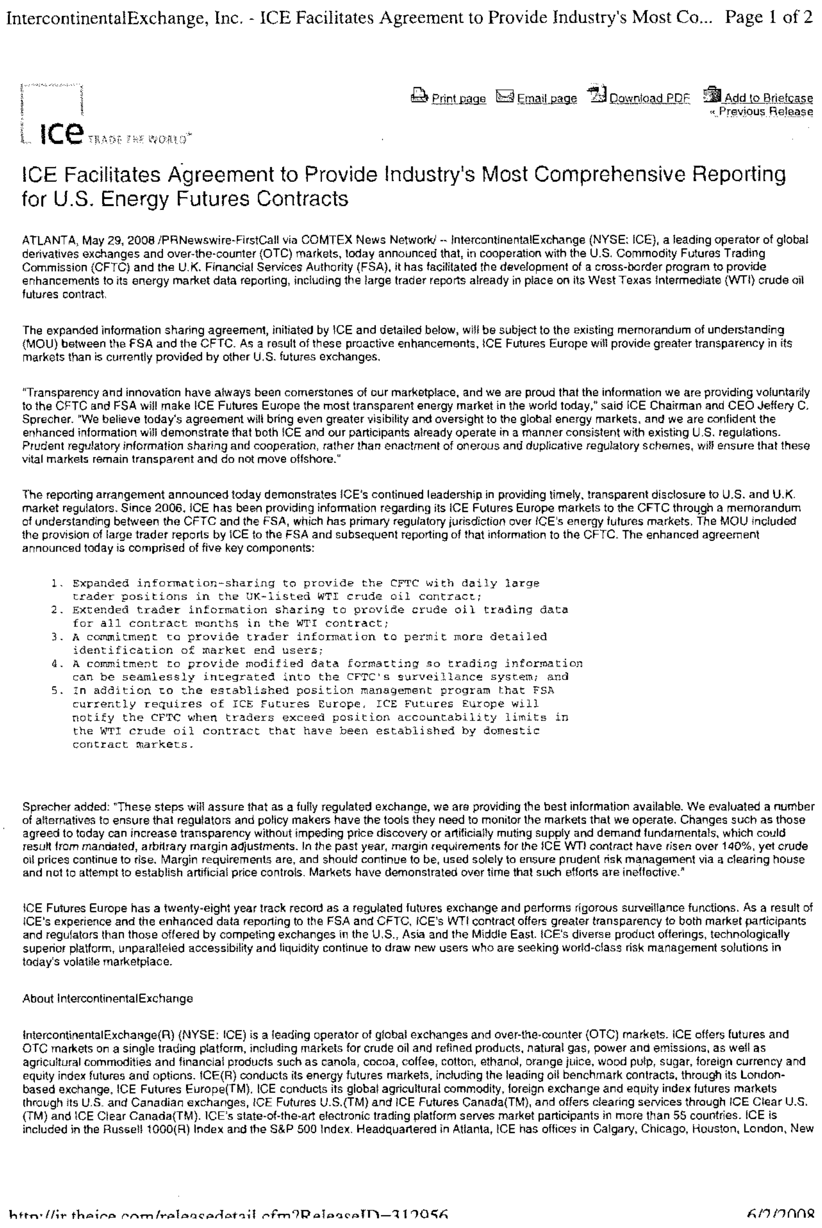

ICE Facilitates Agreement to Provide Industry's Most Comprehensive Reporting for U.S. Energy Futures Contracts

ATLANTA, May 29, 2008 /PRNewswire-FirstCall via COMTEX News Network/ -- IntercontinentalExchange (NYSE: ICE), a leading operator of global derivatives exchanges and over-the-counter (OTC) markets, today announced that, in cooperation with the U.S. Commodity Futures Trading Commission (CFTC) and the U.K. Financial Services Authority (FSA), it has facilitated the development of a cross-border program to provide enhancements to its energy market data reporting, including the large trader reports already in place on its West Texas Intermediate (WTI) crude oil futures contract.

The expanded information sharing agreement, initiated by ICE and detailed below, will be subject to the existing memorandum of understanding (MOU) between the FSA and the CFTC. As a result of these proactive enhancements, ICE Futures Europe will provide greater transparency in its markets than is currently provided by other U.S. futures exchanges.

"Transparency and innovation have always been cornerstones of our marketplace, and we are proud that the information we are providing voluntarily to the CFTC and FSA will make ICE Futures Europe the most transparent energy market in the world today," said ICE Chairman and CEO Jeffery C. Sprecher. "We believe today's agreement will bring even greater visibility and oversight to the global energy markets, and we are confident the enhanced information will demonstrate that both ICE and our participants already operate in a manner consistent with existing U.S. regulations. Prudent regulatory information sharing and cooperation, rather than enactment of onerous and duplicative regulatory schemes, will ensure that these vital markets remain transparent and do not move offshore."

The reporting arrangement announced today demonstrates ICE's continued leadership in providing timely, transparent disclosure to U.S. and U.K. market regulators. Since 2006, ICE has been providing information regarding its ICE Futures Europe markets to the CFTC through a memorandum of understanding between the CFTC and the FSA, which has primary regulatory jurisdiction over ICE's energy futures markets. The MOU included the provision of large trader reports by ICE to the FSA and subsequent reporting of that information to the CFTC. The enhanced agreement announced today is comprised of five key components:

1. Expanded information-sharing to provide the CFTC with daily large trader positions in the UK-listed WTI crude oil contract;
2. Extended trader information sharing to provide crude oil trading data for all contract months in the WTI contract;
3. A commitment to provide trader information to permit more detailed identification of market end users;
4. A commitment to provide modified data formatting so trading information can be seamlessly integrated into the CFTC's surveillance system; and
5. In addition to the established position management program that FSA currently requires of ICE Futures Europe, ICE Futures Europe will notify the CFTC when traders exceed position accountability limits in the WTI crude oil contract that have been established by domestic contract markets.

Sprecher added: "These steps will assure that as a fully regulated exchange, we are providing the best information available. We evaluated a number of alternatives to ensure that regulators and policy makers have the tools they need to monitor the markets that we operate. Changes such as those agreed to today can increase transparency without impeding price discovery or artificially muting supply and demand fundamentals, which could result from mandated, arbitrary margin adjustments. In the past year, margin requirements for the ICE WTI contract have risen over 140%, yet crude oil prices continue to rise. Margin requirements are, and should continue to be, used solely to ensure prudent risk management via a clearing house and not to attempt to establish artificial price controls. Markets have demonstrated over time that such efforts are ineffective."

ICE Futures Europe has a twenty-eight year track record as a regulated futures exchange and performs rigorous surveillance functions. As a result of ICE's experience and the enhanced data reporting to the FSA and CFTC, ICE's WTI contract offers greater transparency to both market participants and regulators than those offered by competing exchanges in the U.S., Asia and the Middle East. ICE's diverse product offerings, technologically superior platform, unparalleled accessibility and liquidity continue to draw new users who are seeking world-class risk management solutions in today's volatile marketplace.

About IntercontinentalExchange

IntercontinentalExchange(R) (NYSE: ICE) is a leading operator of global exchanges and over-the-counter (OTC) markets. ICE offers futures and OTC markets on a single trading platform, including markets for crude oil and refined products, natural gas, power and emissions, as well as agricultural commodities and financial products such as canola, cocoa, coffee, cotton, ethanol, orange juice, wood pulp, sugar, foreign currency and equity index futures and options. ICE(R) conducts its energy futures markets, including the leading oil benchmark contracts, through its London-based exchange, ICE Futures Europe(TM). ICE conducts its global agricultural commodity, foreign exchange and equity index futures markets through its U.S. and Canadian exchanges, ICE Futures U.S.(TM) and ICE Futures Canada(TM), and offers clearing services through ICE Clear U.S.(TM) and ICE Clear Canada(TM). ICE's state-of-the-art electronic trading platform serves market participants in more than 55 countries. ICE is included in the Russell 1000(R) Index and the S&P 500 Index. Headquartered in Atlanta, ICE has offices in Calgary, Chicago, Houston, London, New

2007 Total Trading Volumes from U.S. Terminals on ICE (All Quarters)

	Volume from All Terminals	Volume from U.S. Terminals	Percentage from U.S. Terminals
ICE WTI Futures (Q1-Q4)	48,682,720	31,225,943	64.1%
ICE HO Futures (Q1-Q4)	191,523	126,336	66.0%
ICE RBOB Gasoline Futures (Q1-Q4)	14,470	9,150	63.2%
Total WTI + HO + RBOB (Q1-Q4)	**48,888,713**	**31,361,429**	**64.1%**

2007 Trading Volumes from U.S. Terminals on ICE by Quarter

	Quarter	Volume from All Terminals	Volume from U.S. Terminals	Percentage from U.S. Terminals
ICE WTI Futures	1	12,232,730	6,723,712	55.0%
ICE WTI Futures	2	11,396,272	7,181,216	63.0%
ICE WTI Futures	3	12,680,630	8,788,630	69.3%
ICE WTI Futures	4	12,373,088	8,532,385	69.0%
ICE WTI Futures Total		**48,682,720**	**31,225,943**	**64.1%**
ICE Heating Oil Futures	1	75,930	43,030	56.7%
ICE Heating Oil Futures	2	46,862	28,954	61.8%
ICE Heating Oil Futures	3	39,493	32,570	82.5%
ICE Heating Oil Futures	4	29,238	21,782	74.5%
ICE Heating Oil Futures Total		**191,523**	**126,336**	**66.0%**
ICE RBOB Gasoline Futures	1	1,144	137	12.0%
ICE RBOB Gasoline Futures	2	420	216	51.4%
ICE RBOB Gasoline Futures	3	7,144	5,141	72.0%
ICE RBOB Gasoline Futures	4	5,762	3,656	63.5%
ICE RBOB Futures Total		**14,470**	**9,150**	**63.2%**

Annex 1

Trading volume statistics for the Period - Q1 2007 (01 January - 31 March 2007)

Product	Volume from All Terminals	Volume from U.S. Terminals[1]	Percentage from U.S. Terminals	Total Volume[2]
ICE Brent Futures	13,766,406	4,819,876	35.0%	14,925,813
ICE Gasoil Futures	5,215,001	1,223,525	23.5%	5,634,798
ICE WTI Futures	12,232,730	6,723,712	55.0%	12,804,675
ICE Heating Oil Futures	75,930	43,030	56.7%	75,930
ICE RBOB Gasoline Futures	1,144	137	12.0%	1,144
ICE Richards Bay Coal Futures	15	0	0.0%	15
ICE Rotterdam Coal Futures	885	165	18.6%	1,180
ICE UK Natural Gas Futures	225,425	90,100	40.0%	275,825
ICE UK Electricity Futures (power)	430	20	4.7%	1,700
ICE ECX CFI Futures (emissions)	70,237	6,596	9.4%	192,557
ICE Brent Options	2,532	1	0.0%	17,152
ICE Gasoil Options	3,345	205	6.1%	36,767
ICE ECX CFI Options (emissions)	450	0	0.0%	5,265

[1] Specifically USA-based ICE Futures Members or USA-based RIs registered to UK-based ICE Future

[2] Total Volume includes Exchange for Physical, Exchange for Swap and Block Trades.

Annex I

Trading volume statistics for the Period - Q2 2007 (01 April - 30 June 2007)

Product	Volume from All Terminals	Volume from U.S. Terminals[1]	Percentage from U.S. Terminals	Total Volume[2]
ICE Brent Futures	13,384,719	5,220,047	39.0%	14,637,211
ICE Gasoil Futures	4,917,149	1,301,567	26.5%	5,333,931
ICE WTI Futures	11,396,272	7,181,216	63.0%	12,180,719
ICE Middle Eastern Sour Crude futures	74,080	23,370	31.5%	74,105
ICE Heating Oil Futures	46,862	28,954	61.8%	48,953
ICE RBOB Gasoline Futures	420	216	51.4%	755
ICE Richards Bay Coal Futures	135	0	0.0%	290
ICE Rotterdam Coal Futures	2,050	240	11.7%	2,585
ICE UK Natural Gas Futures	203,310	68,320	33.6%	258,135
ICE UK Electricity Futures (power)	60	0	0.0%	550
ICE ECX CFI Futures (emissions)	92,235	8,129	8.8%	222,495
ICE Brent Options	1,537	0	0.0%	14,579
ICE Gasoil Options	3,804	110	2.9%	37,476
ICE WTI Options	2,341	1,452	62.0%	4,251
ICE ECX CFI Options (emissions)	1,050	0	0.0%	5,875

[1] Specifically USA-based ICE Futures Members or USA-based RIs registered to UK-based ICE Futures Members.

[2] Total Volume includes Exchange for Physical, Exchange for Swap and BlockTrades.

Annex 1

Trading volume statistics for the Period - Q3 2007 (01 July - 30 Sept 2007)

Product	Volume from All Terminals	Volume from U.S. Terminals[1]	Percentage from U.S. Terminals	Total Volume[2]
ICE Brent Futures	14,002,969	5,994,449	42.8%	15,087,012
ICE Gasoil Futures	6,075,356	1,719,848	28.3%	6,606,884
ICE WTI Futures	12,680,630	8,788,630	69.3%	13,352,974
ICE Middle Eastern Sour Crude futures	14,176	2,778	19.6%	14,626
ICE Heating Oil Futures	39,493	32,570	82.5%	41,058
ICE RBOB Gasoline Futures	7,144	5,141	72.0%	7,144
ICE Richards Bay Coal Futures	180	0	0.0%	470
ICE Rotterdam Coal Futures	1,440	60	4.2%	2,395
ICE UK Natural Gas Futures	330,210	221,050	66.9%	378,540
ICE UK Electricity Futures (power)	10	0	0.0%	700
ICE ECX CFI Futures (emissions)	116,698	6,597	5.7%	302,198
ICE Brent Options	2,295	0	0.0%	30,060
ICE Gasoil Options	2,808	10	0.4%	59,250
ICE WTI Options	3,881	1,770	45.6%	5,163
ICE ECX CFI Options (emissions)	1,905	30	1.6%	26,440
Totals	**33,279,195**	**16,772,933**		**35,914,914**

[1] Specifically USA-based ICE Futures Members or USA-based RIs registered to UK-based ICE Futures Members.

[2] Total Volume includes Exchange for Physical, Exchange for Swap and Block Trades.

Annex 1

Trading volume statistics for the Period - Q4 2007 (01 October - 31 December 2007)

Product	Volume from All Terminals	Volume from U.S. Terminals[1]	Percentage from U.S. Terminals	Total Volume[2]
ICE Brent Futures	14,058,629	6,835,095	48.6%	15,078,917
ICE Gasoil Futures	6,439,492	1,799,438	27.9%	6,934,271
ICE WTI Futures	12,373,088	8,532,385	69.0%	13,049,994
ICE Middle Eastern Sour Crude futures	6,483	755	11.6%	6,633
ICE Heating Oil Futures	29,238	21,782	74.5%	39,131
ICE RBOB Gasoline Futures	5,762	3,656	63.5%	5,762
ICE Richards Bay Coal Futures	180	0	0.0%	470
ICE Rotterdam Coal Futures	1,250	0	0.0%	2,675
ICE UK Natural Gas Futures	273,490	139,560	51.0%	320,435
ICE UK Electricity Futures (power)	0	0	0.0%	495
ICE ECX CFI Futures (emissions)	93,181	9,627	10.3%	263,530
ICE Brent Options	101	0	0.0%	12,265
ICE Gasoil Options	249	1	0.4%	25,770
ICE WTI Options	490	445	90.8%	1,002
ICE ECX CFI Options (emissions)	6,726	0	0.0%	19,961
Totals	**33,288,359**	**17,342,743**		**35,761,311**

[1] Specifically USA-based ICE Futures Members or USA-based RIs registered to UK-based ICE Futures Members.

[2] Total Volume includes Exchange for Physical, Exchange for Swap and Block Trades.

Annex 1

Trading volume statistics for the Period - Q1 2008 (01 January - 31 March 2008)

Product	Volume from All Terminals	Volume from U.S. Terminals[1]	Percentage from U.S. Terminals	Total Volume[2]
ICE Brent Futures	15,642,160	6,816,025	43.6%	16,740,079
ICE Gasoil Futures	6,842,075	1,722,949	25.2%	7,283,503
ICE WTI Futures	13,183,524	7,935,547	60.2%	13,903,080
ICE Heating Oil Futures	29,671	19,906	67.1%	31,436
ICE Middle Eastern Sour Crude futures	184	30	16.3%	184
ICE RBOB Gasoline Futures	11,519	3,899	33.8%	11,756
ICE Richards Bay Coal Futures	1,350	0	0.0%	2,080
ICE Rotterdam Coal Futures	2,820	0	0.0%	4,960
ICE UK Natural Gas Futures	265,780	108,675	40.9%	309,545
ICE UK Electricity Futures (power)	0	0	0.0%	10
ICE ECX CFI Futures (emissions)	151,017	23,956	15.9%	346,979
ICE ECX CFI CER Futures*	3,249	33	1.0%	8,589
ICE ECX CFI Options (emissions)	25,000	65	0.3%	83,015
ICE Brent Options	116	0	0.0%	6,396
ICE WTI Options	1,206	991	82.2%	4,248
ICE Gasoil Options	90	90	100.0%	40,971
Totals	36,159,671	16,632,073		38,735,860

[1] Specifically USA-based ICE Futures Members or USA-based RIs registered to UK-based ICE Futures Members.

[2] Total Volume includes Exchange for Physical, Exchange for Swap and Block Trades.

* Launched on 14 March 2008

ice

Richard A. Shilts
Director,
Division of Market Oversight
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581
USA

08 January 2008

Dear Mr. Shilts

Trading volume statistics for 01 October – 31 December 2007

Under the conditions of the original CFTC no-action relief which was granted on 12 November 1999 thereby permitting the Exchange to make available its Natural Gas futures contracts on the ETS Platform, among others, the Exchange was required to satisfy the following condition:

"For each contract available to be traded through ETS, the total trade volume originating from ETS terminals assigned to each of the [Exchange]'s members in the US compared with total trade worldwide volume for such products through ETS and the total worldwide trade volume for such products traded on the [Exchange] generally."

Please find attached:

Annex 1 a table setting out the trading volumes in all of the ICE Futures' contracts which, for the period 01 October to 31 December 2007 shows: (1) the total trade volume originating from electronic trading devices providing access to the trading system in the US, (2) the total trade volume for such products traded through the trading system worldwide, and (3) the total trade volume for such products generally, using the standardised format; and

Annex 2 a list of the names, NFA ID numbers, and addresses of Members having direct access to the platform through terminals located in USA.

This information will also be submitted electronically to dmoletters@cftc.gov.

Please do not hesitate to contact me on +44 (0)20 7265 5729 should you have any questions on the statistics provided.

Yours sincerely,

Mark Woodward
Regulation and Compliance Policy Manager

cc: Duane C Andresen, Special Counsel

Home > News Room > General Press Releases > 2008

Release: 5511-08
For Release: June 17, 2008

CFTC Conditions Foreign Access on Adoption of Position Limits on London Crude Oil Contract

Amended Foreign Access Relief Establishes New Standard

Washington, DC – Today, the Commodity Futures Trading Commission (CFTC or Commission) announced that Commission staff has amended the "no-action relief letter" under which ICE Futures Europe is permitted direct access to U.S. customers. The amended letter conditions direct access on ICE Futures Europe's adoption of equivalent U.S. position limits and accountability levels on its West Texas Intermediary (WTI) crude oil contract, which is linked to the New York Mercantile Exchange crude oil contract.

In addition, pursuant to the amended letter, ICE Futures Europe will follow similar U.S. hedge exemption requirements and will report violations of any such provisions to the CFTC. This action also formalizes the recently-announced information-sharing arrangement between the CFTC and the U.K. Financial Services Authority by requiring ICE Futures Europe to provide the CFTC with detailed market information (equivalent to U.S. standards) for surveillance purposes, as a condition of direct access to U.S. customers. The CFTC will incorporate the foreign exchange's data directly into the CFTC's Commitments of Traders report, which is a weekly report categorizing traders and positions. Commission staff intends to apply these new foreign access conditions to any future requests for direct foreign access to U.S. customers for contracts that cash settle against those listed on any U.S. exchange. The revised Commission staff foreign access conditions must be satisfied by ICE Futures Europe within 120 days.

"These new conditions for foreign access will provide the CFTC with additional oversight tools to monitor linked contracts. This powerful combination of enhanced trading data and additional market controls will help the CFTC in its surveillance of regulated domestic exchanges, while preserving the important benefits of our international recognition program that has enabled proper global oversight during the last decade. This raises the bar for all future foreign access requests and will ensure uniform oversight of linked contracts," said CFTC Acting Chairman Walt Lukken. "The Financial Services Authority, which has robust and appropriate requirements for the maintenance of market integrity and for the prevention of market abuse, has been and continues to be an invaluable partner as we work together to oversee our respective markets."

In November 2006, the CFTC and the Financial Services Authority signed a ground-breaking Memorandum of Understanding (MOU) on market surveillance that provides for the sharing of large trader information with respect to linked contracts on a weekly basis and daily in the settlement week. In May 2008, the amount and quality of information under the earlier MOU was enhanced by, among other things, providing large trader information on a daily basis.

Last Updated: June 17, 2008

U.S. COMMODITY FUTURES TRADING COMMISSION
Three Lafayette Centre
1155 21st Street, NW, Washington, DC 20581
Telephone: (202) 418-5260
Facsimile: (202) 418-5527

Division of
Market Oversight

January 31, 2006

Mr. Mark Woodward
Regulation and Compliance Policy Manager
ICE Futures
International House
1 St. Katherine's Way
London E1W 1UY, UK

Re: Foreign Terminal No-Action Relief and the Proposed Launch of the ICE Futures West Texas Intermediate Light Sweet Crude Oil Futures Contract

Dear Mr. Woodward:

On November 12, 1999, the Division of Trading and Markets (T&M) of the Commodity Futures Trading Commission (Commission) issued a no-action letter to the International Petroleum Exchange Limited (IPE), predecessor to ICE Futures, with respect to its proposal to make its electronic trading and order matching system available to IPE members in the U.S. In that no-action letter, T&M stated that it would not recommend that the Commission institute enforcement action against the IPE or its members solely based upon IPE's failure to obtain contract market designation under Sections 5 and 5a of the Commodity Exchange Act if IPE members trade for their own accounts or, with certain registrant status, accept and/or submit U.S. customer orders to IPE's electronic trading and order matching system. That no-action letter was subsequently amended by the Division of Market Oversight (Division), T&M's successor division, on July 26, 2002, February 24, 2003, March 10, 2003, and April 14, 2003.

On January 17, 2006, ICE Futures notified the Division of its intent to launch a West Texas Intermediate Light Sweet Crude Oil Futures Contract (WTI Contract) on February 3, 2006. The notification was provided pursuant to the Commission's Statement of Policy[1] regarding the listing of new futures and option contracts by foreign exchanges that are operating electronic trading devices in the U.S. pursuant to a foreign terminal no-action letter, indicating that ICE Futures intends to make the WTI Contract available for trading in the U.S.

The Division's November 12, 1999, letter remains valid at this time. Please be advised, though, that the Commission will be evaluating the use of the no-action process in light of significant issues raised by the factual circumstances underlying the subject notice. The

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[1] Notice of Statement of Commission Policy Regarding the Listing of New Futures and Option Contracts by Foreign Boards of Trade that Have Received Staff No-Action Relief to Place Electronic Trading Devices in the United States 65 Fed. Reg. 41641 (July 6, 2000).

Commission's final determination may impact whether ICE Futures will be able to continue to rely on the Division's no-action letter in making its WTI contract available for trading through electronic trading devices in the U.S.

If you have any questions regarding this correspondence, please contact myself, David P. Van Wagner, Chief Counsel, at (202) 418-5481, or Duane C. Andresen, Special Counsel, at (202) 418-5492.

Very truly yours,

Richard A. Shilts
Director

cc: Ted Morris, Manager Derivatives Team, Markets Division, FSA
Gregory C. Prusik, Vice-President Compliance and Registration, NFA
Branch Chief, Audit and Financial Review Unit, Division of Clearing and Intermediary Oversight, Chicago Regional Office

U.S. COMMODITY FUTURES TRADING COMMISSION
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Division of
Market Oversight

June 17, 2008

Ms. Dee Blake
Director of Regulation
ICE Futures Europe
International House
1 St. Katherine's Way
London E1W 1UY, UK

Re: Amendment to No-Action Letter Issued to the International Petroleum Exchange of London (now ICE Futures Europe)

Dear Ms. Blake:

On November 12, 1999, the Division of Trading and Markets of the Commodity Futures Trading Commission (Commission or CFTC) granted to the International Petroleum Exchange of London (IPE) permission to make its electronic trading and order matching system, known as Energy Trading System II (ETS), available to IPE members in the United States.[1] Specifically, the Division of Trading and Markets stated that it will not recommend that the Commission institute enforcement action against IPE or its members solely based upon IPE's failure to obtain contract market designation under Sections 5 and 5a of the Commodity Exchange Act (Act),[2] if: (1) IPE members trade for their proprietary accounts through ETS in the United States; (2) IPE members who are registered with the Commission as futures commission merchants (FCM) or who are exempt from such registration pursuant to Rule 30.10 (Rule 30.10 Firms) submit orders from United States customers for submission to ETS; and/or (3) IPE members who are registered with the Commission as FCMs or who are Rule 30.10 Firms accept orders through United States automated order routing systems from United States customers for submission to ETS.[3] The November 12, 1999 IPE no-action letter was amended by the Division four times between July 26, 2002 and April 14, 2003 as trading of the contracts was transitioned from the ETS to the ICE Platform operated by IntercontinentalExchange, Inc., in Atlanta, Georgia and trading hours were extended (the November 12, 1999 Letter, together with its amendments, being hereinafter referred to as the "Prior No-Action Letters").

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[1] Letter from John C. Lawton, Acting Director, Division of Trading and Markets, to Arthur W. Hahn, Esq., Katten Muchin & Zavis, dated November 12, 1999.

[2] The November 12, 1999 letter referred only to contract market designation because at that time there was no provision in the Act or rules thereunder governing a derivatives transaction execution facility.

[3] The Division of Market Oversight (Division) assumed responsibility for foreign terminal no-action letters in a reorganization of Commission functions following enactment of the Commodity Futures Modernization Act of 2000.

On January 17, 2006, ICE Futures Europe notified the Division of its intent to launch a West Texas Intermediate Light Sweet Crude Oil Futures Contract (WTI Contract) on February 3, 2006 that cash-settled on the price of a physically-settled Light Sweet Crude Oil Futures contract traded on the New York Mercantile Exchange (NYMEX), a U.S. designated contract market (DCM). The notification was provided pursuant to the Commission's Statement of Policy[4] regarding the listing of new futures and option contracts by foreign exchanges that are operating electronic trading devices in the U.S. pursuant to a foreign terminal no-action letter. Subsequent to that notification, the Commission and the UK Financial Services Authority (FSA), ICE Futures Europe's regulatory authority, entered into a memorandum of understanding to share information with the goal of providing information to help to detect and deter any attempts to manipulate the market. On April 12, 2006, ICE Futures Europe notified the Division of its intent to launch the ICE Futures New York Harbour Heating Oil Futures Contract and the ICE Futures New York Harbour Unleaded Gasoline Blendstock (RBOB) Futures Contract on April 21, 2006, each of which is cash-settled on the price of physically-settled contracts traded on the NYMEX.

A foreign board of trade listing for trading a contract which settles on the price of a contract traded on a CFTC-regulated exchange raises very serious concerns for the Commission. Such linkages can create a single market for the subject contracts consisting of both the underlying contract at the CFTC-regulated exchange and the cash-settled "look-alike" contract traded on the foreign board of trade. In the absence of certain preventive measures at the foreign board of trade, this circumstance could compromise the Commission's ability to carry out its market surveillance responsibilities, as well as the integrity of prices established on CFTC-regulated exchanges. As you are also aware, and as stated in the IPE November 12, 1999 no-action letter, "the Division retains the authority to condition further, modify, suspend, terminate, or otherwise restrict the terms of the no-action relief provided herein, in its discretion."

Accordingly, the Division is amending ICE Futures Europe's no-action relief as described in the Prior No Action Letters by adding certain conditions with respect to any ICE Futures Europe contract which settles against any price, including the daily or final settlement price, of (1) a contract listed for trading on a DCM or derivatives transaction execution facility (DTEF), or (2) a contract listed for trading on an exempt commercial market (ECM) that has been determined to be a significant price discovery contract (collectively, "IFE Linked Contracts"). The purpose of these conditions is to ensure that ICE Futures Europe applies to any IFE Linked Contract comparable principles or requirements regarding the daily publication of trading information and the imposition of position limits or accountability levels for speculators as apply to the DCM, DTEF or ECM contract against which the IFE Linked Contract settles. The conditions will also ensure that ICE Futures Europe provides the Commission with information regarding the extent of speculative and nonspeculative trading in IFE Linked Contracts that is comparable to the information provided to the Commission by DCMs, DTEFs or ECMs for publication of the Commitments of Traders Reports.

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[4] Notice of Statement of Commission Policy Regarding the Listing of New Futures and Option Contracts by Foreign Boards of Trade that Have Received Staff No-Action Relief to Place Electronic Trading Devices in the United States 65 Fed. Reg. 41641 (July 6, 2000). That Statement of Policy was rescinded and replaced by the Commission's Notice of Revision of Commission Policy Regarding the Listing of New Futures and Option Contracts by Foreign Boards of Trade that have Received Staff No-Action Relief to Provide Direct Access to their Automated Trading Systems from Locations in the United States. 71 Fed. Reg. 19877 (April 18, 2006); corrected at 71 Fed. Reg. 21003 (April 24, 2006).

Those conditions are:

1. ICE Futures Europe will impose on IFE Linked Contracts, by rule or otherwise, position limits or position accountability levels (including related hedge exemption provisions) that are comparable to the existing position limits or position accountability levels (including related hedge exemption provisions) as adopted by: (i) the DCM, DTEF or ECM for the contract against which the IFE Linked Contract settles or (ii) the DCM, DTEF or ECM for a financially-settled equivalent of such contract;

2. ICE Futures Europe will inform the Commission in a quarterly report of any member that had positions in an IFE Linked Contract above the applicable ICE Futures Europe position limit, whether a hedge exemption was granted, and if not, whether a disciplinary action was taken;

3. ICE Futures Europe will publish daily trading information (e.g., settlement prices, volume, open interest, and opening and closing ranges) that is comparable to the daily trading information published by the DCM, DTEF or ECM for the contract against which the ICE Futures Europe contract settles; and

4. ICE Futures Europe will provide to the CFTC, through the FSA, a daily report of large trader positions in each IFE Linked Contract for all contract months in a form and manner that:
    - can be fully integrated into the CFTC's market surveillance systems, including full identification of each position's beneficial owner comparable to the reporting that is provided by the DCM, DTEF, or ECM;
    - can, subject to the Memorandum of Understanding between the CFTC and FSA, be fully integrated into the CFTC's *Commitments of Traders Report*, including appropriate categorization of traders and their positions.

The Commission recognizes the need for ICE Futures Europe to adopt rules and implement system changes to implement the foregoing, and to take such actions in consultation with the FSA; in addition, the Commission understands that future rule and system changes are subject to approval by the FSA. Subject to ICE Futures Europe's satisfaction of these conditions within 120 days of the date of this letter and continuing to satisfy the other terms and conditions included in the Prior No-Action Letters, the Division hereby confirms that it will not recommend that the Commission institute enforcement action against ICE Futures Europe or its members solely based upon ICE Futures Europe's failure to seek contract market designation or registration as a DTEF under Sections 5 and 5a of the Act. The Division's no-action position does not extend to any other provision of the Act, any other Commission regulations or orders, or to any registered futures association rules and does not excuse ICE Futures Europe or its members from compliance with any applicable requirements thereunder.

The no-action position taken herein is taken by the Division only and does not necessarily reflect the views of the Commission or any other unit or member of the Commission's staff. Finally, as with all no-action letters, the Division retains the authority to condition further, modify, suspend, terminate, or otherwise restrict the terms of the no-action relief provided herein, in its discretion.

If you have any questions regarding this correspondence, please contact David Van Wagner, Chief Counsel, at (202) 418-5481, or Duane C. Andresen, Senior Special Counsel, at (202) 418-5492.

Very truly yours,

Richard A. Shilts, Director

New York
Mercantile Exchange

August 1, 2006

Ms. Eileen Donovan
Acting Secretary
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st St. N.W.
Washington, D.C. 20581

Re: Boards of Trade Located Outside of the United States

Dear Ms. Donovan:

The New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") appreciates the opportunity to comment on the Commodity Futures Trading Commission's ("CFTC" or "Commission") Federal Register Release dated June 8, 2006.[1] The CFTC requested comment on a series of questions pertaining to the interpretation and application of the language in Section 4(a) of the Commodity Exchange Act ("Act") referring to "boards of trade" located outside the U.S." In particular, the Commission solicited comment on the circumstances relevant to when (as a shorthand reference within this comment letter) a board of trade organized outside of the US, i.e., a Foreign Board of Trade ("FBOT") may be deemed to be no longer "located outside the U.S."

NYMEX is a for-profit corporation organized under the laws of the State of Delaware. It is the chief operating subsidiary of NYMEX Holdings, Inc., ("NYMEX Holdings").[2] As a designated contract market ("DCM") and a registered derivatives clearing organization, NYMEX is the largest exchange in the world for the trading and clearing of futures and options contracts on energy and metals commodities.

Summary Overview

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[1] This letter restates and supplements the testimony that NYMEX staff provided at the CFTC's recent public hearing held on June 27, 2006.

[2] NYMEX Holdings' shares are not listed on a national market or exchange but are registered with the Securities and Exchange Commission ("SEC"), and as such, are subject to the rules and regulations of the SEC.

New York Mercantile Exchange, Inc.
World Financial Center
One North End Avenue
New York, NY 10282-1101
(212) 299-2000

The New York Mercantile Exchange, Inc., is composed of two divisions. The NYMEX Division offers trading in crude oil, heating oil, unleaded gasoline, natural gas, electricity, coal, propane, platinum, and palladium. The COMEX Division offers trading in gold, silver, copper, and aluminum.

NYMEX supports vigorous and fair competition and greater globalization of services and products. As global expansion is an important component of our long-term business model, we understand the concern of some U.S. exchanges regarding possible reactions by overseas regulators to the Commission's actions. But we believe that the current review is timely and appropriate and is urgently needed to address the critical need for regulatory parity and consistency as between U.S. exchanges and FBOTs providing direct access to U.S. participants pursuant to Commission staff no-action letters. We find the phrase "boards of trade located outside the United States" to be ambiguous on its face, and we believe that the Commission has authority to interpret this phrase. However, in light of the profound challenges associated with definitional line-drawing, we believe that the more productive and appropriate path for the Commission to take at this time would be to formalize the current staff no-action process. NYMEX believes that the no-action process offers the greatest opportunity for a flexible review that can achieve the Commission's policy objectives as well as facilitating the expansion of U.S. access to foreign markets.

However, it is vitally important to underscore the need to ensure that the Commission's regulatory decisions facilitate a "level playing field" among competing markets. The promotion of "fair competition" is now codified in the law (that the CFTC is charged with applying and enforcing) as one of the key purposes of that statute. Accordingly, we believe that it is vitally important that the Commission provide US exchanges subject to its jurisdiction with the same flexibility accorded to foreign boards of trade (who are operating in the US on the basis of CFTC staff no-action letters premised upon such exchanges being subject to comparable regulation abroad). Indeed, a commitment to such regulatory consistency is an inherent requirement for just and equitable treatment, regulatory fairness and substantive due process under the law.

NYMEX Support for Globalization
NYMEX has long been a champion of vigorous competition and of greater globalization of services and products, and global expansion is an important component of our long-term business model. As a rapidly growing global market presence, we have offices in London and Tokyo as well as an office that opened recently in Singapore. Our original electronic trading system commenced operations in June of 1993 and by the following year, we had received approval to provide electronic access to our markets to users in the United Kingdom and have since provided electronic access to our trading platforms there pursuant to our status as a "recognised overseas investment exchange" ("ROIE"). To date, we have confirmed 24 overseas jurisdictions that have either approved screen trading access to NYMEX products or confirmed that approval is not required, and we are adding to this list on a regular basis.

We are also expanding our global presence through the listing of products whose characteristics are modeled upon underlying commodities that originate outside the U.S. Thus, for example, NYMEX's global expansion includes the addition of cleared futures contracts for Singapore Fuel Oil, European Fuel Oil, Naptha and Gasoline. Additionally, NYMEX's affiliate, NYMEX Europe Limited, is a U.K.-based exchange that is fully recognized by the Financial Services Authority ("FSA") that lists contracts based on European energy products. Furthermore, in 2005, we announced the creation of the Dubai Mercantile Exchange, a joint venture with Tatweer Dubai, L.L.C, a subsidiary of Dubai Holding, to develop the first energy futures exchange in the Middle East to be located in the Dubai International Financial Centre and which is expected to list contracts based on Middle East and Far East energy products.

Because global expansion both in terms of products and market access is an important component of our long-term business model, we understand and are sensitive to the concerns expressed by other U.S. exchanges and intermediaries about possible reactions by non-U.S. regulators to the determinations to be made by the Commission on the FBOT issues under review.

We believe that the CFTC has exhibited strong leadership and has followed a practical and forward thinking approach to cross-border trading, which has resulted in substantial growth opportunities for both U.S. and foreign markets. We also have been generally supportive of the CFTC's staff no-action process exempting (under certain conditions) foreign boards of trade that provide direct electronic access to U.S. participants from the requirement to be registered with and regulated by the CFTC as a contract market.

However, we also recognize that circumstances have changed considerably since the no-action process first began nearly a decade ago. There have been substantial advances in technology since the former era of closed end proprietary trading systems. New exchanges have emerged that operate on a solely electronic basis, and products have now been listed under the no-action process that are parallel (if not identical) to contracts listed by U.S. exchanges that are subject to full CFTC regulation. Therefore, we believe that the current review being undertaken by the CFTC is timely and appropriate, and we commend the Commission for its willingness to address these difficult topics.

Background

In addition to the history cited in the Commission's Federal Register release, we believe that it is also very relevant to recall that, in June of 1999, in response to the no-action letters being issued by Commission staff and the Commission order withdrawing its proposed rules, the Chicago Board of Trade, the Chicago Mercantile Exchange ("CME") and NYMEX (collectively for purposes of this paragraph, the "Exchanges") jointly submitted a Section 4(c) petition to the Commission, seeking exemptive relief, including relief under which the Exchanges would be able to implement trading rules and procedures comparable to those of a competing foreign exchange operating under a Commission staff no-action letter, *provided* that such rules and procedures would *only* apply to contracts listed by the U.S. exchange that were subject to direct competition from a contract listed by the foreign exchange.[3] Although the Commission subsequently published the petition for public comment,[4] no other action was ultimately taken on that petition.[5] However, this background indicates that the issue of regulatory parity or fairness is not a new issue and that this competition concern has yet to be fully resolved as a matter of public policy.

Commission's Authority to Interpret the Phrase "Board of Trade Located Outside the United States"

Contrary to those who would read Section 4(a) of the Act as a permissive subsection, we note that this subsection instead establishes a general prohibition with a limited carve-out. Specifically, Section 4(a) makes it unlawful for any person to offer to enter into, to enter into, to execute, to confirm the execution of, or conduct any office or business anywhere in the U.S. for the purpose of soliciting or accepting any order or otherwise dealing in any transaction in, or in connection with, a futures contract, unless such futures transaction is: (1) conducted on or subject to the rules of a DCM or derivatives transaction execution facility; (2) conducted on or subject to the rules of a board of trade located outside of the U.S.; or (3) otherwise exempted by the CFTC pursuant to Section 4(c).[6]

First, it should be noted that the statutory prohibition is very broad; it applies to (1) any person (2) conducting any office or business in the U.S. (3) in connection with a futures contract. Second, the statute does not provide any guidance as to the meaning either of the phrases "conducting any office or business anywhere in the U.S." or "located outside of the United States."[7]

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[3] The Exchanges also sought the ability to list new contracts without Commission pre-approval and the ability to list new rules or rule changes ten days after the filing of such changes with the Commission. The Commodity Futures Modernization Act ("CFMA") of 2000 has clearly already addressed both of these areas of requested relief

[4] 64 FR 46536, August 25, 1999.

[5] In the wake of the landmark CFMA legislation, the petition for exemptive relief was neither formally acted upon by the Commission nor withdrawn by the Exchanges.

[6] Section 2(a) of the Act provides the CFTC with exclusive jurisdiction over transactions involving futures contracts.

[7] Thus, for example, the phrase "conduct any office or business anywhere in the U.S." could be interpreted to refer to a board of trade organized outside of the U.S. that: (1) maintains a marketing office and staff in the U.S.; (2) that maintains its computer host for its trade matching engine in the U.S.; (3) maintains computer servers, routers or other trade routing, matching, or reporting infrastructure in the U.S.; and/or (4) derives a substantial portion of its order flow from the U.S.

While the phrase "board of trade located outside the United States" is set forth in words that arguably could qualify as "plain English," it does not necessarily follow that the phrase has a "plain meaning" or is without ambiguity. In our view, the language of the statute that provides an exception (from the broad prohibition) for a board of trade located outside of the U.S. is, on its face, ambiguous. We do not believe that the phrase "board of trade located outside of the U.S." is unambiguous, i.e., capable of only one meaning or interpretation and leading to only one conclusion.[8] Instead, it could mean that the board of trade is organized outside of the U.S., or that its core operations are located outside of the U.S., or even that it does not maintain an office, personnel or any trade communication or matching equipment or infrastructure physically located in the U.S. Congress simply did not speak directly to the issue of what constitutes a "board of trade located outside of the United States", particularly in the context of electronic trading facilities. In other words, the phrase is at a level of generality that we believe that a number of possible interpretations could reasonably be assigned to it by the Commission through an interpretation or rule.

As a general matter, Section 8a (5) of the Act provides the CFTC with the authority to make and promulgate such rules and regulations, as in the judgment of the Commission, are reasonably necessary to effectuate any of the provisions or to accomplish any of the purposes of the Act. Consequently, as to Section 4(a), the Exchange believes that it is clear that the CFTC has the authority, if it chooses to do so, to promulgate a new rule interpreting the scope of Section 4(a)'s exception for "board of trade located outside of the U.S." Moreover, under the Chevron doctrine,[9] the CFTC, as the federal functional regulator authorized under the CEA, is entitled to make a reasonable interpretation of a statute where the statute is itself ambiguous.[10]

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[8] We note that, among those responding to the current request for comment, one commenter asserted that the phrase "board of trade located outside the United States" is unambiguous. Yet, the same commenter then went on to provide its own meaning of this term as referring to core operations being located outside the U.S., a definition that cannot be found either in the Act itself or in its legislative history.

[9] Chevron, U.S.A., Inc. v. NRDC, 467 U.S. 837 (1984). Chevron requires courts to defer to the agency's interpretation when the relevant statute is "silent or ambiguous with respect to the specific issue" involved, so long as the agency's interpretation is "based on a permissible construction of the statute." Chevron, 467 U.S. at 843. Accordingly, when the statute does not "directly address [ ] the precise question at issue," reviewing courts must affirm the agency's interpretation if it represents a "reasonable choice within a gap left open by Congress." Id. at 866. Reviewing courts may not second-guess an agency's policy determinations; if Congress has not expressed a clear intent on the relevant issue, the only question before a court is whether the rules promulgated by the agency are reasonable, not whether those rules are appropriate in the court's view. Such judicial deference is required even if an agency changes its interpretation of a statutory term from time to time in response to complex and evolving circumstances. See id. at 863-64: Of course, an initial agency interpretation is not instantly carved in

We believe that the issue is not whether the Commission has the inherent authority to interpret this phrase under its current statutory authority. It does. Rather, the real issue instead is how best to apply that authority. As will be discussed in greater detail below, while we believe that it might be possible to cobble together a set of criteria that might serve as a definition of this phrase, we recognize, as does much of the rest of the industry, that such a process would be a profoundly challenging and difficult exercise for the Commission. Accordingly, while the Commission may want to reserve for the future the possibility to revisit this area, we believe that by far the best approach at this point in time would be to provide guidance to Commission staff in the continuation of the ongoing staff no-action letter process.

Focus on Staff No-Action Process

In the Federal Register release, the Commission posed a number of questions aimed at identifying criteria that could be used to determine whether a FBOT's level of presence within the U.S. was so extensive as to require designation as a contract market. We recognize that this analysis generates profoundly difficult line-drawing challenges for the Commission.

There are a number of possible factors or criteria relating to a FBOT that could initially appear to be relevant to the analysis as to whether it is operating as a U.S. exchange, including where orders originate, location of the matching engine, whether U.S. produced and delivered commodities underlie the contracts, primary business activities located in the U.S., advertising and business solicitation in the U.S., etc. As NYMEX indicated during the hearing, a closer analysis of the various criteria likely could identify a number of shortcomings with different factors or indicia, such as with reliance on volume as discussed immediately below.

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stone. On the contrary, the agency, to engage in informed rule-making, must consider varying interpretations and the wisdom of its policy on a continuing basis. Accordingly, any new rule promulgated by the CFTC at the conclusion of its notice and comment procedures that is a "permissible construction" of section 4(a) of the CEA would be expected to be upheld on review.

[10] See Commodity Futures Trading Comm'n v. Schor et al., 478 U.S. 833, 844-45 (1986) (applying Chevron and according "considerable weight" to the CFTC's interpretation of the CEA); Commodity Trend Service, Inc. v. Commodities Futures Trading Comm'n, 233 F.3d 981, 987 (7th Cir. 2000) ("the CFTC's construction of the CEA is entitled to Chevron deference"); Thrifty Oil Co. v. Bank of America Nat'l Trust and Savings Ass'n, 322 F.3d 1039, 1058 n.24 (9th Cir. 2003) ("federal courts generally give 'great deference' to CFTC interpretations of the CEA") (citation omitted).

Level of U.S. Presence

The Commission has sought comment, among other things, on whether the extent of U.S. presence in the U.S. is an appropriate threshold. Presence of FBOT activities in the U.S., including management, back office operations, order matching/execution facilities, clearing facilities and the vast majority of its personnel, might suggest one basis for finding that the FBOT is no longer located outside of the U.S. As a historical matter, the no-action relief was clearly predicated upon representations by the FBOT that it had minimal presence in the U.S, [11] and to date, the staff no-action letters have been consistent in requiring the exchanges receiving such no-action letters to report quarterly volume to the Commission, in some instances, without being able to distinguish whether the order originated in the U.S. or abroad.[12]

However, NYMEX has been consistent over the years in identifying the shortcomings associated with reliance on the percentage of trading volume originating in the U.S. Thus, for example, NYMEX noted in a prior comment letter to the Commission on the CFTC's concept release regarding "placement" of foreign terminals that, given the inherent fluctuations in price for many commodities traded on futures markets, trading volume similarly could fluctuate considerably from one calendar quarter to the next.[13] In addition, as was discussed in some detail at the hearing, orders can be routed electronically through brokers anywhere in the world. Moreover, the difficulty of identifying U.S. customer orders from non-U.S. customer orders may require costly system changes at the firm level.

Similarly, location of the matching engine as the basic test presents difficulties as well, given the proliferation of screen-based trading and the declining significance of the location of the physical trading facility. The matching engine can be located anywhere in the world, with no relevance to where the market's corporate headquarters is located or to what country has jurisdiction. Delivery location for physically settled contracts has implications for the broader U.S. economy. However, we recognize that it potentially presents issues for U.S. exchanges whose futures contracts are delivered abroad. Finally, we, like other U.S. exchanges, fear repercussions from foreign jurisdictions where our electronic trading screens are located, to the extent that they may determine to impose additional regulatory burdens on our market.

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[11] For example, the International Petroleum Exchange (IPE now known as ICE Futures), in its original request for no-action relief, specifically represented that its principal business office was located in London, and that it maintained a single, representative office in the U.S. which employed two persons for the purpose of providing educational and marketing materials. Moreover, IPE represented that no trade processing or clearing functions were performed by IPE in the U.S. CFTC Letter No. 99-69 at p. 2 (November 12, 1999). Significantly, as a condition of the Commission's no-action letter, IPE was required to provide written notice to the Division of "[a]ny material change in the information provided in its No-Action Request." Id. at p. 14. The Division noted that "material" changes in the information provided would include, among other things, "the location of IPE's management, personnel, or operations (particularly changes that may suggest an increased nexus between IPE's activities and the United States)." Id. n. 61

[12] *71 FR 34070 (June 13, 2006). n. 26.*

[13] Letter to Jean A Webb from R. Patrick Thompson, dated, October 7, 1998, at p. 7.

Furthermore, the location of the governing board and/or the location of a trade matching engine or other technology may also be viewed as problematic in establishing a bright-line test. Should such factors be established as core criteria, it is possible to envision that a FBOT could respond over time by moving its hardware elsewhere as well as by reconstituting its governing board.

Exchanges organized and regulated abroad, but whose order matching infrastructure and order flow is primarily located in the U.S. and which list contracts that mimic contracts listed on U.S. regulated futures exchanges and target U.S. customers, are engaging in activity that we believe falls squarely within the CFTC's statutory mandate. This is particularly the case where the underlying commodity significantly impacts the U.S. economy, such as West Texas intermediate crude oil, which serves as a benchmark for domestic and global energy prices.

This was clearly not the scenario contemplated by the current no-action regime. Given the blatant use of the no-action relief process as a vehicle for regulatory arbitrage in what appears to be a deliberate effort to circumvent CFTC regulations for competitive gains, it is time to revisit this process. The competitive and regulatory policy issues that have arisen in this area are extremely serious and should not be taken lightly, given the potential long-term negative ramifications if not appropriately addressed.

Accordingly, in considering its statutory mission as part of the current review, we suggest that the Commission needs to assess the extent to which it is willing to rely on regulation by other regulators and on information-sharing arrangements with those regulators. While recognizing that there may be special circumstances from time to time where DCM registration must be seriously considered, we now believe that it is prudent for the Commission to make the greatest use possible of the no-action process to achieve its statutory objectives. As Commissioner Lukken has noted in a recent speech, agencies such as the CFTC do not have the resources to sufficiently monitor the breadth of the global marketplace and its participants. Consequently, accomplishing the CFTC's mission may involve "coordination among those regulators abiding by the highest global standards."[14]

We also would suggest that the no-action process offers the greatest opportunity for a flexible review. Under this approach, Commission staff, acting on the basis of general guidance or standards provided by the Commission, can undertake an individualized review of each request that considers the facts and circumstances of that exchange and its regulatory regime and that allows staff to issue letters that may be specifically customized and tailored to that exchange and also revised over time.

In this regard, we join with the CME and others who would welcome a more formalized process akin to the ROIE category for overseas exchanges that is routinely utilized by the FSA. In our view, such a process would be the Commission path most likely to also facilitate expanding U.S. access to foreign markets.[15]

We further recommend that the Commission or Commission staff conduct a thorough review from time to time of foreign markets operating in the U.S. under existing no-action letters. In particular, in light of the many changes that have occurred in the futures industry since the outset of the foreign terminals no-action process, including the considerable advances in electronic trading systems, we believe that the staff analysis may need to take a closer look going forward in terms of what may be deemed to be "comparable." Moreover, with U.S. exchanges competing with foreign exchanges on the same products and for the same customers, mere "comparability" may no longer be the appropriate standard for U.S. exchanges to remain viable and competitive. ✓

The analysis should be designed to instill greater discipline and rigor into the comparability analysis with particular focus on FBOT rules with regulatory and competitive implications for U.S. markets and customers. A primary goal should be a "regulatory gap" analysis that can identify significant regulatory differences in the FBOT's program that may raise significant competition concerns with a U.S. ~~exchange. Once identified, the~~ Commission staff could ensure parity and fundamental fairness for U.S. exchanges either by adding additional requirements to the no-action letters where appropriate (such as when there are

has this been done?

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[14] Keynote Address of CFTC Commissioner Walter L. Lukken before the International Swaps and Derivatives Association's Energy, Commodities and Developing Products Conference, Houston, Texas, June 14, 2006.

[15] While we believe that an eventual statutory codification of such a category would be beneficial in adding greater legal certainty to the existing no-action process, we note nonetheless that the current no-action process has been left undisturbed by Congress both in 2000 and during the current reauthorization review that should be finalized shortly.

directly competing products) or by providing appropriate relief to domestic exchanges. To that end, the Commission should consider a measured approach that will further the Commission's regulatory and public policy objectives and deepen and enhance the strong relationships that have been developed with other international regulators.

Finally, we strongly encourage the Commission to be vigilant and proactive in ensuring that U.S. exchanges are not competitively disadvantaged by foreign exchanges operating under more flexible regimes than those imposed on U.S. markets and to incorporate regulatory parity and consistency principles as fundamental components of the review process of applications being submitted to CFTC staff by overseas exchanges.

Regulatory Parity and a Level Playing Field

It is critical to the continued success of U.S. markets that the Commission ensures that its regulatory decisions do not unwittingly create a competitive disadvantage for our markets relative to foreign markets. A primary goal of the CFMA was to facilitate a level playing field for U.S. exchanges in the competitive battle with other markets with varying levels of regulation, including both OTC and foreign markets. The promotion of "fair competition" is now embodied in the law as one of the key purposes of the statute. that the CFTC must enforce. Both Congress and the CFTC have emphasized continually the importance of "fair competition" and of "even-handed regulation." Accordingly, we continue to believe that it is vitally important that the Commission provide U.S. exchanges subject to its jurisdiction with the same flexibility afforded to foreign boards of trade operating in the U.S. on the basis of CFTC staff no-action letters.

NYMEX is particularly concerned about the apparent lack of regulatory parity as it pertains to position limits. We acknowledge at the outset that there are other factors that contribute to decisions on where to trade energy contracts. Indeed, as ~~I noted during~~ my testimony at the hearing, there are a number of business or market factors that currently affect the intense competition between NYMEX and ICE Futures. Several of these factors are within NYMEX's control, and we are moving aggressively to address these matters. We also acknowledge and accept that it may be appropriate to have somewhat different treatment depending on whether a particular contract involves physical delivery or cash settlement.

However, we strongly believe that the regulatory imbalance ~~on matters~~ such as position limits is clearly a significant factor in this competition that does directly sway trading decisions, and this factor—~~the imbalance~~ in applicable regulatory treatment—is within the CFTC's purview. As was noted several times during the recent hearing, traders often tend to seek the path of least resistance. This recognition is consistent with our own experience and with feedback that we have received from numerous users of our markets. In the face of the current regulatory imbalance, traders respond in several ways: 1) some shift their business over to the less restrictive market as they approach the limits on our contracts; 2) some have a preference for not dealing with the hedge limit exemption process and therefore shift all of their market share to the market with no limits; and 3) others simply prefer a less restrictive regulatory environment generally and similarly shift their trading activity to the less restrictive market.

In our recent experience, "regulatory arbitrage" is not a hypothetical concern but is actually already underway for certain of our listed products. This process harms markets because of the distortion of market efficiency occurring when customers make choices among the same or similar products on the basis of differences in regulatory treatment among providers rather than on the basis of intrinsic distinctions in the products themselves or in related services.

We believe that a level playing field is absolutely necessary in order to ensure fair competition between NYMEX and the FSA-regulated ICE Futures Exchange. In this regard, it may be useful to recall that Core Principle 5 for designated contract markets does not formally require use of position levels or position accountability levels. Instead, Core Principle 5 by its terms provides that DCMs adopt such tools only "where necessary or appropriate."

By comparison, the FSA, which seemingly has been deemed by CFTC staff to be comparable on various regulatory fronts including market surveillance, does not require either position limits or position accountability levels either for physically settled contracts (such as the ICE Futures gasoil futures contract that has been available on the screen to US participants for several years) or for financially settled contracts (such as the contracts listed more recently by ICE Futures). It would seem that the FSA has demonstrated to Commission staff that position limits are not necessarily the only way to achieve the common goal of preventing market manipulation.[16] A flexible regulatory approach is essential to allowing U.S. exchanges to compete against foreign markets offering the same product to the same customers.[17]

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[16] As we understand it, the CFTC staff review looks at the totality of circumstances of an overseas regulatory regime to assess, among other things, how the absence of an approach commonly used by the Commission might be addressed in other ways. Similarly, a DCM is provided with reasonable discretion pursuant to Core Principle 1 in "establishing the manner in which it complies with the core principles." We believe that this totality of circumstances approach is also translatable to a DCM's showing as to how it continues to comply with the core principles. In other words, we believe that a concern with a hypothetical "race to the bottom" is misplaced and is inconsistent with the current method of compliance with the core principles.

[17] We believe, for example, that the replacement, for certain physically settled contracts listed on a DCM, of hard position limits with flexible position accountability standards should be seriously explored and could strengthen the competitiveness of U.S.

We believe that a commitment to such regulatory consistency is an inherent requirement for just and equitable treatment, regulatory fairness and substantive due process under the law. A Commission stance of following a similar regulatory approach for similar activities would be consistent not only with the Administrative Procedures Act but also with the protection of the due process clause of the Fifth Amendment to the U.S. Constitution. There is a long line of precedent that has established that an agency action is arbitrary when the agency offered insufficient reasons for treating similar situations differently. Transactive Corp. v. U.S., 91 F. 3d 232, 237 (D.C. Cir. 1996). See, e.g., Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mutual Auto Ins. Co., 463 U.S. 29, 57, 103 S. Ct. 2856, 2874, 77 L. Ed. 2d 443 (citing Greater Boston Television Corp. v. FCC, 444 F 2d 841, 852 (D.C. Cir. 1970), cert. denied, 403 U.S. 923, 91 S. Ct. 2229, 2233, 29 L. Ed.2d 701 (1971)); Airmark Corp. v. FAA, 758 F.2d 685, 691-692 (D.C. Cir. 1985); Local 777, Democratic Union Organizing Committee v. NLRB, 603 F.2d 862, 872 (D.C. Cir. 1978).

Thus, for example, the D.C. Circuit has ruled that once an agency has agreed to allow exceptions to a rule, it must provide a rational explanation if it later refuses to allow exceptions in cases that appear similar. Green Country Mobilephone v. FCC, 765 F.2d. 235, 237 (D.C. Cir. 1985), citing NLRB v. Washington Star Co., 732 F.2d 974, 977 (D.C. Cir. 1984).

Furthermore, we would respectfully suggest that a Commission approach of recognizing that similar activities should be treated in a similar manner also would be consistent with its statutory obligations under Section 15 of the Act. Section 15 provides in pertinent part that the CFTC must consider the public interest to be protected by the anti-trust laws and endeavor to take the least anti-competitive means of achieving the objectives, policies and purposes of the Act. A no-action process under which foreign exchanges may operate in the U.S. under regulatory approaches at considerable variance from various CFTC regulatory burdens while continuing to impose such burdens upon domestic exchanges creates a lopsided regulatory environment that is inherently anti-competitive.

Conclusion

We believe that a commitment to regulatory parity is an inherent requirement for just and equitable treatment, regulatory fairness and substantive due process under the law. Time is of the essence for NYMEX on this issue. We urge the Commission to move quickly to establish a process that will ensure true regulatory parity and fundamental fairness

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exchanges facing challenges from foreign exchanges offering identical products to identical customers.

Should you require any additional information or have any comments or questions regarding this comment letter, please do not hesitate to contact me at any time.

Very truly yours,

James E. Newsome
President and
Chief Executive Officer

cc: Reuben Jeffery III, Chairman
Walt Lukken, Commissioner
Michael Dunn, Commissioner
Fred Hatfield, Commissioner

CFTC Letter No. 99-69
No-Action
November 12, 1999
Division of Trading & Markets

VIA FACSIMILE and U.S. MAIL

Arthur W. Hahn, Esq.
Katten Muchin & Zavis
25 West Monroe Street
Suite 1600
Chicago, IL 60661-3693

Re: Sections 5 and 5a - The International Petroleum Exchange of London Limited; Request for No-Action Relief from Contract Market Designation Requirement

Dear Mr. Hahn:

This is in response to your letter dated May 14, 1999 to the Division of Trading and Markets ("Division") of the Commodity Futures Trading Commission ("CFTC" or "Commission"). By this correspondence, you request, on behalf of The International Petroleum Exchange of London Limited ("IPE" or "Exchange") and its members,[1] that the Division grant no-action relief to permit IPE to make its electronic trading and order matching system, known as Energy Trading System II ("ETS"), available to IPE members in the United States[2] ("No-Action Request"). Specifically, IPE wishes to make ETS available to: (i) IPE members who wish to trade for their proprietary accounts[3] through ETS; (ii) IPE members who are registered with the CFTC as futures commission merchants ("FCMs") or are exempt from such registration pursuant to Rule 30.10 ("Rule 30.10 Firms")[4] and who wish to submit the orders of United States customers[5] to ETS; and (iii) IPE members who are registered with the CFTC as FCMs or who are Rule 30.10 Firms and who wish to accept orders from United States customers through automated order routing systems ("AORSs")[6] for submission to ETS. You request that the Division confirm that it will not recommend enforcement action to the Commission against IPE or its members if IPE does not seek designation as a contract market pursuant to Sections 5 and 5a of the Commodity Exchange Act ("CEA" or "Act")[7] or comply with those Commission regulations that specifically relate to contract markets in connection with the installation and use in the United States of ETS and/or AORSs that are used to submit orders to ETS.

As you know, on March 24, 1999, the Commission published proposed rules that would have governed the circumstances under which foreign futures exchanges could be accessed from electronic trading devices in the United States.[8] On June 2, 1999, the Commission issued an order that withdrew those rules and directed the Commission staff to begin considering requests from foreign exchanges for interim no-action relief to allow them to place trading systems in the United States on a temporary basis until the Commission itself promulgates rules or guidelines in this area ("June 2 Order").[9] In accordance with this instruction, the Division has reviewed IPE's No-Action Request and the materials submitted in support thereof. Among other things, IPE forwarded the following information to the Division:

- General information regarding IPE (*e.g.*, a description of its location, organization, and activities in the United States);
- IPE's Memorandum and Articles of Association;
- The specifications of the contracts traded on IPE;

- IPE's Floor Membership Application;
- A description of ETS and a copy of the ETS User Agreement;
- A description of the trade registration, settlement, and clearing systems applicable to ETS;
- IPE's Regulations and Floor and ETS Trading Procedures;
- IPE's Registered Electronic Trader Training Manual and Workstation User Guide;
- Selected provisions of the Financial Services Act 1986, Part VII of the Companies Act 1989, and the Financial Services and Markets Bill[10] relating to Recognized Investment Exchanges;
- A description of the regulatory regime in the United Kingdom applicable to the operation of IPE, ETS, transactions executed on IPE; transactions executed through ETS; and IPE and ETS participants;
- IPE's Regulatory Plan; and
- A description of certain applicable information-sharing arrangements.

Representations made by IPE regarding the activities conducted from IPE's representative office in the United States, IPE's membership criteria, the ETS system, the relevant regulatory regime in the United Kingdom, and the information-sharing arrangements applicable to ETS are summarized in Sections I - V below. For purposes of its response to the No-Action Request, the Division has relied upon IPE's representations and has not conducted an independent review to confirm their accuracy.[11]

I. GENERAL INFORMATION REGARDING IPE

IPE is the largest-volume energy futures and options exchange in Europe. The Exchange offers contracts in Natural Gas (NBP) futures,[12] Gas Oil futures and options, Fuel Oil futures, and Brent Crude Oil futures and options. Traditionally, IPE has been a floor-based market, with trading occurring through an "open outcry" auction process. IPE launched the original ETS in January 1997 to trade Natural Gas (NBP) futures contracts. IPE began using a refined version of ETS for trading the same contracts in February 1999. Currently, Natural Gas (NBP) futures contracts are traded solely through ETS. All other contracts continue to be traded through open outcry on the floor of IPE. Commencing in March 2000, IPE will offer Gas Oil futures and options contracts and Fuel Oil futures contracts for trading through ETS during specified periods before and after, but not concurrent with, the open outcry trading hours on IPE for such contracts. Brent Crude Oil futures and option contracts will be available for after-hours trading through ETS beginning in June 2000. IPE has received approval from the relevant regulatory authorities to place ETS Workstations[13] in several European countries.[14]

IPE is a member-owned, not-for-profit organization that was formed in the United Kingdom in 1980. Its principal business office is located in London, but it maintains a single, representative office in the United States. IPE's United States office is located in New York, New York and employs two persons. The purposes of this office are to provide information regarding the Exchange and its contracts to current and potential U.S.-located IPE members, traders, and customers as well as customer service and support. The New York office staff generally achieves these objectives through various educational and marketing endeavors (*e.g.*, attending and participating in conferences, hosting corporate events, and preparing and distributing research and reports on the industry).[15] IPE represents that the New York office staff does not provide investment advice nor solicit, receive, or direct orders with respect to the products traded on IPE. IPE further represents that no trade processing or clearing functions are performed by IPE in the United States.

IPE also operates an Internet web site located at www.ipe.uk.com. The purpose of IPE's web site is to provide visitors with the specifications of the contracts available for trading on the Exchange and other information regarding IPE's products.

II. MEMBERSHIP

A person may not trade directly upon ETS, unless the person becomes a member of the Exchange. IPE has established three classes of membership: (i) Floor Members; (ii) Local Floor Members; and (iii) Trade Associate Members ("TAMs"). All IPE members are required to comply with the Exchange's membership criteria through the duration of their respective memberships.[16] IPE members also are required to sign an agreement prescribed by the Exchange's directors in which they agree to be bound by IPE Regulations insofar as they relate to the members' class of membership. IPE members may engage in trading through ETS to the extent that they are either authorized to do so pursuant to United Kingdom law, or are exempt from the authorization requirement.[17]

Floor Members are the Exchange members that may transact business on IPE both on their own behalf and on behalf of their customers. To become a Floor Member, an entity must, among other things: (i) be a firm or company; (ii) maintain a properly established office in or sufficiently close to London for the conduct of business on IPE; (iii) have a minimum net worth of £500,000 ($820,539);[18] (iv) be a member of the Securities and Futures Authority ("SFA");[19] and (v) be a Clearing Member of the London Clearing House Limited ("LCH")[20] or satisfy IPE that it is a party to a clearing arrangement with a clearing member of LCH.[21]

Local Floor Members are permitted to trade for their proprietary accounts or on behalf of Floor Members and other Local Floor Members, but not directly on behalf of customers. A Local Floor Member must, among other things: (i) confirm to IPE that it is an individual or a closely-held entity; (ii) have a net worth sufficient to establish a clearing arrangement; (iii) be a member of the SFA; and (iv) be a party to a clearing arrangement with an LCH Clearing Member.

TAMs are sub-divided into two classes of membership. One class of TAMs may trade only Natural Gas (NBP) futures contracts and may trade such contracts solely as principals for their own accounts. They have no voting rights. A smaller number of TAMs have neither voting nor trading rights. The sole purpose of their membership is to maintain close contact with IPE (*i.e.*, to ensure that they receive Exchange information circulars and publications). To qualify as a TAM, an entity must: (i) be able to demonstrate a bona fide, continuing interest in the production, processing, manufacture, distribution, trading, or use of physical energy products; (ii) generally have participated in the physical energy business for a sufficient period of time to ensure IPE that the TAM is an appropriate customer for the Exchange and have adequately satisfied the standards for business conduct in that industry; (iii) have a net worth of £100,000 ($164,108); and (iv) establish a clearing arrangement with a clearing member of LCH.

Clearing Members of IPE are subject to higher financial resource requirements than those set forth above. The enhanced financial qualifications have been established by IPE in conjunction with LCH[22] and vary depending upon the person(s) for whom the Clearing Member clears. Clearing Members that clear only for their proprietary accounts are required to have a minimum net worth of £500,000 ($820,539). Clearing members that clear only for their proprietary accounts, customer accounts; and/or for Local Floor Members must have a minimum net worth of £1,000,000 ($1,641,077). Clearing members that clear for their proprietary accounts, customer accounts; Local Floor Members, and other IPE members must have a minimum net worth of £2,000,000 ($3,282,083). IPE Members are required to submit financial returns to the Exchange to demonstrate ongoing compliance with their financial obligations. IPE shares such information, where appropriate, with LCH, the FSA, and regulators in the United Kingdom and elsewhere.

IPE membership is open to natural persons, partnerships, and corporate entities that satisfy the membership criteria, regardless of the location of the entity or the type of business in which the entity is engaged. However, IPE membership is restricted to bona fide commodity professionals. Accordingly, IPE represents that United States retail customers could not become members of the Exchange. IPE's Directors retain the absolute discretion to approve or disapprove an applicant for membership, subject to the applicant's rights to reconsideration and appeal. The Exchange's Directors also retain the authority to expel a member from membership or to suspend any or all of a member's membership rights.

III. OVERVIEW OF ETS

A. Technical Aspects of ETS

1. Introduction

At the outset, the Division notes that the description of the ETS system set forth herein is based upon representations made by IPE or its representatives. The Division has not performed an independent assessment of the security or soundness of the system.

2. ETS Architecture

a. Components

ETS is an open system that does not require dedicated terminals to operate. IPE provides its members with certain components of the system, while requiring them to purchase other elements. Specifically, the Exchange supplies the central order processing facilities of the system, known as the "Trading Host;" the local area network ("LAN"); the front-end trading application software ("Trading Application"); and certain hardware and software through which the Trading Application communicates with the Trading Host. IPE members that wish to utilize ETS must purchase their own Windows NT workstations ("ETS Workstations")[23] and leased lines.

b. Trading Host

The Trading Host performs the security, order processing, and connection monitoring functions of the ETS system. Among other things, the Trading Host maintains a database of currently authorized ETS Traders, validates a trader's authority to trade on ETS, processes and records all orders, validates requests for order modifications and cancellations, matches orders, maintains the central order book, sends market broadcast data messages to ETS Workstations, and monitors the performance of the system connections between the Trading Host and the ETS Workstations. IPE represents that the Trading Host underwent comprehensive business and technical testing before it was declared operational.

c. Trading Application

The Trading Application is the front-end trading application software that runs on an ETS Workstation. The Trading Application itself does not perform any services. Rather, it serves as the interface between the services provided by the Trading Host and the ETS Workstation. Currently, IPE Members must purchase and use the Trading Application offered by IPE. They may not use self-developed Trading Applications or Trading Applications that have been purchased from independent software vendors.

d. Network

ETS is based upon an Ethernet LAN maintained at one of IPE's satellite offices in London. An Ethernet LAN and attached ETS application servers that act as a back-up to the main servers at this office are maintained at a different satellite office in London. IPE represents that the ETS network is operated to achieve at least 99.98% availability.

e. ETS Workstation

Although IPE members are responsible for purchasing their own ETS Workstations, IPE requires that such workstations satisfy certain minimum specifications established by the Exchange. For example, IPE generally requires that the ETS Workstations adhere to prescribed levels of processing speed, megabyte RAM, and disc capacity.

3. Access to ETS

An IPE member who wishes to trade through ETS must do so through one or more traders that have been registered with IPE and have been granted the right to trade through ETS ("ETS Traders"). [24] Members are required to have a sufficient number of ETS Traders for the nature and the volume of business they conduct.[25] Persons wishing to become ETS Traders must satisfy certain requirements. Among other things, an ETS Trader must:

- be either:
- a trader employed by or representing a Floor Member or a Local Floor Member or
- an individual Local Floor Member;
- be a member of the SFA (unless the ETS Trader is a TAM);
- be "fit and proper," as determined in accordance with SFA rules;
- be authorized as an ETS Trader by the FSA;
- complete a training program and pass a competency examination;[26]
- obtain a certification from a compliance officer of the IPE member for whom he will be trading that states that the Exchange member has authorized the ETS Trader to trade on its behalf;
- be able to obtain the use of the ETS Workstation of the member for whom he trades;
- ensure that his staff is adequately trained and properly supervised; and
- be authorized to adjust or withdraw any order submitted under his Individual Trader Mnemonics ("ITMs").[27]

ETS Traders must use the ETS system in accordance with the ETS User Agreement and Workstation User Guide and comply with all IPE Regulations. A person's status as an ETS Trader maybe suspended or revoked as a result of disciplinary action taken under IPE Regulations.

ETS includes security mechanisms designed to prevent unauthorized access to the system.[28] An ETS Trader cannot enter an ETS Workstation and hence, the Trading Host, until he inputs the unique user name that has been assigned to him by an IPE Supervisor[29] and his eight-character password. The user name is derived from the ITM assigned to the ETS Trader by the Trading Host. IPE requires ETS Traders to alter their passwords no less frequently than every thirty days. Passwords are encrypted at the point of entry.

4. Order Processing System

ETS accepts several types of orders for execution, including limit orders, cross trade orders,[30] stop limit orders, fill or kill orders, and intra-commodity spread orders. ETS will match new and standing orders if. (i) one order is a buy order and the other order is a sell order; (ii) the two orders are for the same contract, the same delivery month, and, in the case of options, the same exercise price; and (iii) the price of the buy order is equal to or better than the price of the sell order. If all of the foregoing criteria are satisfied, ETS will determine the trade quantity executed in the transaction based upon the lower of the quantity of the new order or the remaining quantity of standing order(s) in the market at the time the new order is placed.

ETS utilizes the same trade matching algorithm for all contracts traded on IPE. The algorithm is a first-in, first-out ("FIFO") system that matches orders in a strict time and price sequence. Specifically, the "oldest" order in the system at a given price has a higher priority and is filled prior to any subsequently placed orders at the same price. Once a standing order is completely filled, the remaining orders will be filled based upon the time of entry of the order, in accordance with the FIFO algorithm. Thus, older orders are favored; newer orders are filled only if sufficient volume remains. The time associated with an order is the time of its arrival at the Trading Host, not the time it is submitted at the ETS Workstation.

5. Trade Registration and Clearing, Processing Systems

IPE's trade registration system ("TRS") and clearing processing system ("CPS") are real-time trade administration systems that provide integrated trade registration and clearing facilities for both IPE's open outcry and ETS markets. During the initial phases of ETS, while contracts continue to be traded on the IPE floor, clearing and settlement functions will continue to be carried out by clearing members in London on behalf of IPE members located outside of the United Kingdom. IPE intends to develop a new Windows-based application program interface ("API") for TRS and CPS that will support a PC application and will provide essentially the same functions of the existing TRS and CPS. When the API becomes available, members located outside of the United Kingdom who wish to gain direct access to IPE's clearing and settlement facilities may do so via ETS.

The clearing process starts with the entry of the details of an executed trade into TRS. Trades affected upon ETS are matched automatically and entered into TRS as matched trades. By using TRS terminals, IPE members can check their trading activity and the status of individual trades and may complete registration by assigning trades to the correct account for margining and position-keeping, adding account references, and allocating or claiming trades.[31] Although full counterparty information is passed to TRS, this information will not be displayed upon users' terminals, to ensure post-trade anonymity. IPE requires that trades be processed completely (including the allocation, claim, and assignment of the trade) within thirty minutes of trade execution, so that all trades will be fully registered thirty minutes after the market closes. IPE members are required to ensure that at least one member of their staff that possesses the authority to resolve mismatches and/or misallocation remains on duty until thirty minutes after the close of the trading of a contract on ETS.

CPS provides position maintenance and clearing functions for IPE members. It carves out end-of-day processing and transmits the details of matched trades to LCH for registration. LCH will receive the details of the instructions IPE members have submitted to TRS and CPS, details of settlement prices, margin data, members' full margin reports, clearing member reports, and open interest reports. LCH settles and clears all trades executed on ETS by the end of the relevant trade date.

6. Audit Trail

IPE members are required to maintain proper and complete accounting and other records relating to all contracts made, whether such contracts are for the member's proprietary or customer accounts. Separate accounts must be kept with respect to each customer and all orders and accounts must be given a unique and clearly identifiable reference. Members must keep daily records of open positions.

ETS Registered Traders must ensure that an order received from a customer for execution on ETS, whether such order is received before or in the course of the ETS trading session, is recorded on an order slip.[32] ETS Traders must time-stamp all order slips immediately upon receipt on a time-stamping machine that is unique to the IPE member for whom it trades and that is adjacent to the member's ETS Workstation.[33] The order must be time-stamped again if it is altered, executed, or cancelled by the customer or if it is transmitted to another location before being shown to the market. In addition, orders sent through ETS are time-stamped by the system itself.

Order slips relating to business transacted on ETS must contain the following information: IPE member identification; a client identifier or reference; whether the trade is for the house or a customer account (if known); the identity of the person completing the slip; the ITM under which the order is being submitted; whether the order is to buy or to sell; the contract; contract month; quantity; price, price limit, or price range; and any other order instructions (*e.g.*, order type, price/quantity specification). If the order is an option, the order slip must note whether it is a call or put option and the exercise price. Order details must be retained by IPE members for no less than three years after the date of the transaction. All telephone conversations by ETS Traders with respect to business done on ETS must be conducted on audio-logged lines. Recordings of audio-logged lines must be retained by IPE members for a period of no less than three months after the date of the recording. IPE has full access to the audit trail information described above in order to satisfy itself that appropriate procedures and controls are in place with respect to business conducted on ETS.

7. System Response Times

IPE represents that the Trading Host and network have been designed and sized to process ETS transactions (under normal conditions) in under two seconds. The system sizing includes contingencies for substantial growth in product range and for trading volume that significantly exceeds currently-projected levels. IPE further represents that the network has been constructed to ensure that, as far as is physically possible, no one network connection is disadvantaged over another and that response times across borders will be equivalent. IPE will not accept cross-border response times that vary by more than .01 second.

8. Reliability

IPE has identified certain areas in which the ETS system may fail and has adopted specific remedial procedures. In the event of the failure of a leased kilostream line, ISDN line, central site router, customer router, or central site server, IPE's Network Monitoring Centre ("NMN") would be notified immediately and the NMN would take appropriate measures to correct the problem. IPE anticipates that all such difficulties will be resolved within four hours of occurrence. In the event that an ETS Workstation at an IPE member firm's office failed, IPE customers would be responsible for repairing or replacing all hardware and non-ETS software. However, IPE would provide additional ETS software, as necessary, after the workstation has been repaired or replaced.

ETS Traders would be alerted to a major failure of the Trading Host through a system error message shown on their ETS Workstations. In this event, all orders would be held as inactive until the Trading Host was restarted. Generally, the market would be re-opened following the procedures that are followed at the start of a normal trading day. If a Trading Application or its link to the Trading Host fails, the ETS Trader would be permitted to transfer his order to any replacement trader with whom he has an arrangement to share order books and the replacement trader would be permitted to trade in his stead. If the ETS Trader did not have such an arrangement, his orders would be deactivated.

B. IPE's Year 2000 Program

IPE is using the British Standards Institute DISC Compliance Standard for Year 2000 ("Y2K") Compliance which has been adopted by a majority of United Kingdom companies as their Y2K compliance testing benchmark. The IPE's "core" systems (*i.e.*, systems that are involved in the ability to service IPE members and their customers) have been successfully tested by IPE, LCH, and a representative sample of twelve IPE members. IPE's "non-core" systems (*i.e.*, internal systems that affect the effectiveness of IPE) have been successfully unit and integration tested. ETS was developed as a Y2K compliant system and was fully and successfully integration tested in June 1999. IPE has required its members to certify that their own electronic systems have been tested for Y2K compliance and that any problems that were discovered during those tests have been corrected. IPE members must also agree to perform additional testing on January 1, 2000 and the Exchange will not permit members to access ETS until such testing is complete. IPE submitted the results of its Y2K testing to the FSA and the FSA announced that it was satisfied with the results in September 1999.

C. Adherence to IOSCO Principles

IPE represents that it employed the expertise of industry specialists during the design, building, and implementation of ETS to ensure that the resulting system infrastructure would follow best industry practice and quality standards. It also represents that, in developing and operating ETS, IPE has adhered to, and will continue to adhere to, the Principles for the Oversight of Screen-Based Trading Systems for Derivative Products developed by the Technical Committee of the International Organization of Securities Commissions ("IOSCO Principles").[34] In connection with the FSA's exercise of its oversight of IPE as a Recognized Investment Exchange ("RIE"), IPE has satisfied the FSA that the arrangements for ETS and its use of the technology employed by that system are satisfactory.

D. Demarcation of Responsibility and Liability

Due to the open nature of the ETS system, it is likely that most, if not all, trading activity on ETS will occur away from IPE's direct oversight and control and that the roles assigned to particular individuals at a member's site may differ considerably both from member to member and from the traditional roles on a market floor. IPE requires that its members ensure that all persons on the member's staff sufficiently understand the manner in which ETS operates to perform their assigned roles effectively. IPE members and certain persons on their staff also are responsible for ensuring that: (1) the arrangements for conducting IPE business are consistent with IPE Regulations and (ii) all business conducted by way of such arrangements is consistent with IPE Regulations. IPE may institute disciplinary action against and impose sanctions upon both Exchange members and/or their ETS Traders should they fail to perform these duties. IPE Regulations stipulate that neither IPE nor its officers, employees, agents, or representatives may be held liable to an IPE member or customer for any loss or damage arising from or in connection with the occurrence of a suspension or closure of IPE or a disruption in ETS service, regardless of cause.

IV. OVERVIEW OF THE REGULATORY STRUCTURE IN THE UNITED KINGDOM

A. Introduction

IPE is subject to a comprehensive regulatory regime in the United Kingdom. This regulatory structure includes, among other things: financial and other fitness criteria for industry participants; reporting and recordkeeping requirements; procedures governing the treatment of customer funds and property; sales practice and other conduct of business standards; provisions designed to protect the integrity of the markets; and statutory prohibitions on fraud, abuse, and market manipulation. Responsibility for financial services legislation and broad policy in the United Kingdom lies with Her Majesty's Treasury, which is answerable to Parliament. Responsibility for regulating the conduct of investment business and for providing investor protection in the United Kingdom rests with the FSA. Additional authority to prevent and prohibit market manipulation rests with the United Kingdom's Department of Trade and Industry and the Serious Fraud Office.

The principal legal provisions for investor protection in the United Kingdom's financial services sector are contained in, or derived from, the Financial Services Act 1986 ("FS Act") and the FSA fulfills its regulatory responsibilities within the framework established by that Act and related legislation.[35] The FSA also has established Statements of Principle ("FSA Principles") that set forth universal standards of practice, including standards relating to internal organization; the financial resources, integrity, skill, care, and diligence of market participants; customer assets; conflicts of interest; market practice; information about customers; information for customers; and relationships with regulators.[36]

The Division notes that the Commission previously reviewed the regulatory regime administered and enforced by the FSA applicable to transactions on United Kingdom exchanges in connection with the relief it granted to the FSA's predecessors in 1989. On May 19, 1989, the Commission issued orders pursuant to Rule 30.10 that granted exemptive relief to the members of the Association of Futures Brokers and Dealers ("AFBD"), The Securities Association ("TSA"),[37] the Investment Management Regulatory Organization ("IMRO"), and the SIB to permit such members to solicit and accept orders from United States customers for otherwise permitted transactions on non-United States exchanges that are "Designated Investment Exchanges."[38] In each of these orders, the Commission noted that the standards for relief set forth in Rule 30.10[39] generally had been satisfied by each of the petitioning regulatory authorities, and compliance by the Rule 30.10 Firms with applicable United Kingdom law and the rules of the respective petitioning authority could be substituted for compliance with certain provisions of the CEA and the Commission's rules set forth in the Commission's orders.[40]

B. Regulation of the IPE as an RIE

IPE is an RIE[41] under the FS Act and, as such, is exempt from the requirement that it be "authorized" to conduct "investment business"[42] in the United Kingdom in relation to the operation of its markets.[43] However, to acquire recognition status, IPE was required to satisfy several statutorily-prescribed recognition requirements. IPE must continue to fulfill these obligations in order to maintain its recognition status. Among other things, IPE is required to: retain specified financial resources; operate its markets with due heed to the protection of investors and to ensure that trading is conducted in an orderly and fair manner; maintain suitable arrangements for trade reporting; maintain suitable arrangements for the clearing and settlement of contracts;[44] monitor compliance with its rules; enforce its rules; investigate complaints with respect to its business; maintain rules to deal with the default of its members; cooperate with other regulatory bodies through the sharing of information or otherwise;[45] maintain high standards of integrity and fair dealing; and prevent abuse. The FSA has produced a formal interpretation of the statutory recognition requirements that sets forth the meaning of those obligations in practical terms.

The FSA is the authority charged with ensuring that RIEs, such as IPE, continue to comply with the recognition criteria and is authorized to de-recognize any RIE that fails to meet the statutory recognition requirements. Accordingly, IPE is subject to the oversight of the FSA. The FSA exercises its supervisory responsibility by conducting an ongoing assessment of whether IPE's rules, procedures, and practices are adequate for the protection of investors and for the maintenance of an orderly market. For this purpose, the FS Act requires IPE to report changes in its rules and procedures to the FSA within seven days of such amendments becoming effective. In practice, IPE notifies the FSA of significant changes to its rules or procedures before such changes become effective. IPE is also required to produce an annual regulatory plan detailing its intended regulatory activities over the succeeding twelve months. IPE has never been declared to be in breach of its regulatory responsibilities.

C. Regulation of IPE Members

Because trading through ETS constitutes the carrying on of investment business in the United Kingdom, most United Kingdom-based members of the IPE that trade through ETS are required to be authorized under the FS Act.[46] To obtain authorization, an applicant must satisfy the FSA that it is "a fit and proper person" to carry on investment business and to provide the financial services in which it intends to engage. In addition, most IPE members that trade through the ETS are subject to the rules of an SRO.[47] Because IPE requires its Floor Members and Local Floor Members to be members of the SFA, a majority of IPE members are subject to rules imposed by the SFA.

SFA members are required to be "fit and proper persons" to carry out investment business. In evaluating a membership applicant's fitness, the SFA may consider a variety of factors, including the applicant's integrity, honesty, competence, and financial soundness. The directors, employees, or representatives of firms whose activities include managing investments, procuring persons to enter investment agreements, or giving advice on investment agreements must be registered with the SFA as registered representatives and, with limited exception, have passed an SFA-required examination.[48] The SFA also imposes, among other things, fitness standards; financial resource requirements (that are designed to reflect, among other things, the firm's position risk and its exposure to counterparties); sales practice rules (*e.g.*, rules governing the responsibility of a firm for its employees and agents; the suitability of investment products for private customers; solicitation, advertising, and publishing; the contents of customer agreements; the disclosure of risks, material interests, and charges and other remuneration; and the handling and recording of customer complaints); rules designed to ensure the integrity of the market (*e.g.*, rules regarding best execution, customer order priority, and customer order allocation; restricting the offer of illiquid or off-market investments; prohibiting members from trading ahead of customers; and prohibiting the churning of accounts and switching of contracts); and reporting and recordkeeping requirements.[49] The SFA further requires the maintenance of compliance procedures. The FSA may impose disciplinary actions and levy fines for violations of these requirements.

D. IPE's Regulations and Trading Procedures

All trading on IPE through ETS must be conducted in accordance with IPE Regulations and the rules of LCH. IPE Regulations are applicable to IPE members without regard to jurisdictional boundaries because the obligations thereunder arise by virtue of the contractual relationship between the Exchange and its members. IPE Regulations are designed to enable the Exchange to fulfill its recognition obligations, including the requirement that it ensure that its market is fair and orderly and is operated with due regard to the protection of investors. IPE Regulations are also intended to impose the FSA Principles and other regulatory guidance issued by the FSA that is relevant to IPE's business. Members and each of their respective ETS Traders are subject to disciplinary action for failure to comply with IPE Regulations. Disciplinary action may result in fines, suspension, expulsion, or unlimited fines. Members are responsible for the actions of their ETS Traders. Firms that cease to be members of IPE and ETS traders who are de-registered remain subject to IPE's disciplinary jurisdiction for one year afterwards or for as long as disciplinary proceedings continue.

IPE Regulations contain both substantive provisions relating to membership requirements and trading and procedural provisions relating to discipline, arbitration, and the default of members. Among other things, IPE regulations prohibit fraud and market manipulation and require IPE members to: (i) satisfy minimum financial resource requirements;[50] (ii) observe high standards of integrity, fair dealing, and market conduct; (iii) act with due skill, care, and diligence; (iv) avoid or manage conflicts of interest; (v) record all details of customer orders, execute customer orders promptly (except where otherwise permitted by IPE Regulations), and submit details of customer trades to IPE for registration and clearing; (vi) maintain accounting and other records sufficient to create an audit trail with respect to IPE business; (vii) submit financial statements on a regular basis; (viii) address customer complaints; (ix) take such steps when a customer defaults as are open to the member to reduce the customer's liability; and (x) ensure that the appropriate procedures and controls are in place with respect to the business the member conducts. IPE Regulations also generally prohibit any member from committing any act or engaging in any conduct likely to bring the IPE into disrepute or otherwise be substantially detrimental to the interests of the exchange.

United Kingdom law requires that RIEs, such as IPE, and RCHs, such as LCH, maintain rules that allow the RIE or RCH to declare a member to be a defaulter and to close out all open positions on the market. Market authorities are not required to wait for the commencement of formal insolvency proceedings to declare a default if they possess a good faith belief that the member will be unable to meet its future obligations under market contracts.[51] Accordingly, IPE has promulgated rules that delineate the procedures to be followed by IPE in the event of default. However, LCH's default rules take precedence over IPE's default rules with respect to contracts to which LCH is party. If, therefore, a clearing member were to default, LCH would apply its default rules to the registered contracts, while IPE would deal with the back-to-back contracts between the defaulting clearing member and its customer and the non-clearing members for which it clears. Were a non-clearing member to default, only IPE's default rules would apply. The default rules of both LCH and IPE set forth, among other things, the circumstances under which the respective authority may declare a member to be in default, the actions that the authority may take in the event of default, the type of resources that may be used to satisfy the defaulting member's obligations, and the sequence in which such resources may be used.

IPE has appointed two principal officers (collectively, "IPE Supervisors") to monitor compliance by IPE members with Exchange Regulations as they relate to trading on ETS from the United States or on behalf of United States customers. They are supported by a team of compliance assistants and a market supervision team that monitors both open outcry and electronic trading in real time. At least one IPE Supervisor or his qualified designee is available at all times IPE is open for trading to offer clarification or advice with respect to IPE Regulations.

IPE has granted IPE Supervisors real-time access to information regarding its member firms (*e.g.*, order books) to help ensure that trading is conducted in accordance with IPE Regulations. IPE Supervisors continually monitor all user activity on a real-time basis. IPE Supervisors are authorized by the Exchange to take the necessary measures to confirm that IPE members are in compliance with Exchange Regulations,[52] including logging off and disabling ETS users' access at the network and trader/supervisor level. If a user is logged off, all open orders for that user are cancelled and purged from the system. If a user's name and password are disabled, the user will be prohibited from logging on to the system absent Exchange approval.

IPE's compliance and regulatory functions are overseen by its Business Conduct Committee ("BCC"). The BCC is required to appoint at least one Compliance Officer responsible for monitoring compliance with and investigating alleged breaches of IPE Regulations. The Compliance Officer and his department both investigate suspected misconduct that has been reported to them[53] and identify suspicious trades or patterns. In order to facilitate its investigations, the Compliance Department will analyze, among other things, data held on IPE's computer systems; members' trade paperwork; and relevant audio, video, and telephone logs. If the Compliance Officer forms the provisional conclusion that a breach of IPE Regulations has occurred, he reports the alleged breach to the BCC which may authorize an investigation into alleged infringement. The BCC also is empowered to investigate any disorders on IPE and other events or practices that may impair the orderly conduct of the Exchange or the performance of the contracts that are traded on the Exchange. All IPE members are required to cooperate with such investigations. The panel investigating such incidents is required to submit a written report, including its recommendations to IPE's directors or the BCC. The directors or BCC may commence disciplinary proceedings, refer the matter back to the original or a new investigation panel for further inquiry, issue a warning, or decide that no further action should be taken. If allegations of non-compliance with IPE Regulations are upheld, the Disciplinary Panel may impose anyone or a combination of the following sanctions: a private warning or reprimand; a notice of censure; disqualification of the member or any of its partners, directors, employees, or associates from being a director or member of a committee or panel of the Exchange for a definite or indefinite period; suspension or curtailment of market access for a definite or indefinite period; a recommendation to the directors that any or all of the member's rights of membership be suspended; a recommendation that the member be expelled from membership; and an unlimited fine.

V. INFORMATION-SHARING

As set forth more fully below, pursuant to the terms and conditions of the no-action relief provided herein, the Division will be entitled to receive certain specified information regarding ETS directly from IPE. Additional information relevant to IPE and IPE and ETS participants will be available to the Commission and its staff through certain information-sharing arrangements to which both the CFTC and the FSA or the SIB are parties. These include, without limitation, the Memorandum of Understanding ("MoU") on Mutual Assistance and the Exchange of Information between the United States Securities and Exchange Commission and the CFTC, and the United Kingdom Department of Trade and Industry and the SIB dated September 25, 1991 and the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations, as amended, March 1998 (commonly known as the "Boca Declaration").[54]

VI. CONCLUSION

Consistent with the Commission's June 2 Order,[55] the Division has reviewed and considered IPE's No-Action Request and the information and documentation forwarded to the Division in support thereof. Among other things, the materials furnished by IPE indicate that IPE has a single, representative office in the United States, but that the staff of that office does not provide investment advice nor solicit, receive, or direct trading orders from that office; IPE does not maintain order matching or clearing facilities in the United States; IPE is an RIE under the laws of the United Kingdom; IPE, ETS, and IPE and ETS participants are subject to oversight in the United Kingdom by a legitimate regulatory authority that is responsible for ensuring their compliance with an extensive regulatory regime; ETS adheres to the IOSCO Principles; and the CFTC and the FSA are parties to various information-sharing arrangements applicable to ETS participants and activities involving ETS.[56]

Based specifically upon these and other representations made by IPE in support of its NoAction Request, the Division has determined that granting no-action relief to IPE and its members, pending the adoption by the Commission of rules or guidelines regarding access to foreign boards of trade from electronic trading devices in the United States, would not be contrary to the public interest. Accordingly, subject to compliance with the terms and conditions stated herein, the Division will not recommend that the Commission institute enforcement action against IPE omits members solely based upon IPE's failure to obtain contract market designation pursuant to Sections 5 and 5a of the CEA, if: (i) IPE members trade for their proprietary accounts through ETS in the United States; (ii) IPE members who are registered with the Commission as FCMs or who are Rule 30.10 Firms submit orders from United States customers for transmission to ETS; and/or (iii) IPE members who are registered with the Commission as FCMs or who are Rule 30.10 Firms accept orders through United States AORSs from United States customers for submission to ETS.

The Division's no-action position is only applicable to the contracts described below, and shall become effective with respect to such contracts as follows:

(i) The relief is effective immediately with respect to the:

- Natural Gas (NBP) Daily futures;
- Natural Gas (NBP) Monthly futures; and
- Natural Gas (NBP) Balance-of-the-Month futures contracts.

(ii) The relief will become effective with respect to the following contracts immediately upon such contracts becoming eligible for trading on ETS:

- Gas Oil futures and options;
- Fuel oil futures; and
- Brent Crude futures and option contracts.

If additional contracts or products become available for trading through ETS and IPE wishes to make such contracts or products available in the United States through ETS, IPE must request in writing and receive supplementary no-action relief prior to offering such contracts or products. In the event that a supplemental request for relief is made by IPE, IPE will not be required to submit materials already received by the Division in connection with the No-Action Request addressed herein, unless there has been a material change in the structure, operation, or regulation of IPE or ETS such that the information that already has been provided to the Division no longer remains accurate. Any supplemental request for expanded no-action relief to cover different IPE products need only be accompanied by a certification to the effect that the material information previously submitted to the Division remains accurate and by a description of the contracts or products available for trading on ETS to which IPE wishes to extend the Division's no-action relief.

The scope of the Division's no-action position is restricted to providing relief from the requirement that IPE obtain contract market designation pursuant to Sections 5 and 5a of the CEA and regulatory requirements that flow specifically from the contract market designation requirement in the event that the above-referenced contracts are made available in the United States through ETS, in the manner set forth herein. The Division's no-action position does not extend to any other provision of the CEA, any other Commission regulations, nor to any NFA rules, and does not excuse IPE or its members from compliance with any applicable requirements thereunder. Nor does the no-action position alter, restrict, or expand the coverage of existing Commission exemptions for particular products.

The Division specifically notes that its no-action position does not alter the requirement that a firm operating pursuant to the no-action relief provided herein must be a registered FCM or be operating pursuant to Rule 30.10 relief to engage in the offer or sale of a foreign futures contract or foreign options transaction for or on behalf of a United States foreign futures or foreign options customer. For example, nothing in this letter is intended to alter current Commission rules and staff interpretations that require generally that any foreign firm that clears trades on a fully-disclosed basis on behalf of United States persons (including where the United States person is a non-clearing member of a foreign board of trade trading solely for its proprietary account) be a registered FCM or a Rule 30.10 Firm, unless the foreign firm solely carries accounts on behalf of United States customers that are its proprietary accounts (as defined in Rule 1.3(y)) of the foreign firm.[57] If the foreign firm is either a member of the relevant foreign board of trade or is a foreign affiliate of a registered FCM in the United States and its sole contact with a United States customer is that it carries the FCM's omnibus account, it need not register under Rule 30.4.[58]

Moreover, the Division's no-action position does not amend, revise, or negate the obligations of FCMs and Rule 30.10 Firms under the Act, Commission regulations, or Rule 30.10 orders. For example, Rule 30.10 Firms continue to be prohibited from maintaining a presence in the United States. Thus, Rule 30.10 Firms cannot maintain electronic terminals providing direct access to ETS in the United States (although they would be permitted to accept orders overseas from customers located in the United States that submit such orders by telephone or through an AORS located in the United States). FCMs or Rule 30.10 Firms who solicit or accept orders from United States customers for trading on ETS remain responsible for, among other things, complying with the regulatory requirements governing risk disclosure, the handling and allocation of customer orders, and the segregation of customer funds.

The Division's no-action position does not affect the Commission's ability to bring appropriate action for fraud or manipulation. The Division specifically notes that the use of an AORS to transmit orders to ETS would be subject to all existing Commission rules and regulations and to any future rules or guidance propounded by the Commission or the Division. Finally, this letter does not address issues that might arise under the Securities Act of 1933, the Securities Exchange Act of 1934, and other applicable federal securities laws or rules promulgated thereunder.

The Division's no-action position is subject to compliance with the following conditions:

- IPE will continue to satisfy the criteria for designation as an RIE under the applicable laws of the United Kingdom with respect to transactions effected through ETS.
- The laws, systems, rules, and compliance mechanisms of the United Kingdom applicable to IPE will continue to require IPE to maintain fair and orderly markets; prohibit fraud, abuse, and market manipulation; and provide that such requirements are subject to the oversight of the FSA.
- IPE and ETS will continue to adhere to the IOSCO Principles as updated, revised, or otherwise amended.
- Only members of IPE will have direct access (*i.e.*, not through an AORS) to ETS and IPE will not provide, and will take reasonable steps to prevent, third parties from providing such access to ETS to persons other than IPE members.[59]
- All orders that are transmitted through ETS by a member of IPE that is operating pursuant to the no-action relief provided herein and that is not registered with the Commission as an FCM or that is not a Rule 30.10 Firm will be solely for the "proprietary accounts," as defined herein, of such IPE member.
- All orders for United States customers accepted through an AORS and/or transmitted by IPE members through ETS will be intermediated by an IPE member that is either registered with the Commission as an FCM or is a Rule 30.10 Firm.
- IPE will require each current and future Exchange member that is not registered with the Commission as an FCM to file with IPE a written representation, executed by a person with the authority to bind the member, stating that as long as the IPE member operates pursuant to the no-action relief provided herein, the member agrees to and submits to the jurisdiction of the Commission with respect to activities conducted pursuant to the no-action relief IPE will obtain the foregoing representation before it permits the relevant member to operate pursuant to the no-action relief and will maintain the representation as long as the member is operating pursuant to that relief. IPE will make such representations available to the Commission upon the request of a Commission representative.
- IPE will require each current and future Exchange member that is not registered with the Commission as an FCM to file with IPE a valid and binding appointment of a United States agent for service of process in the United States pursuant to which the agent is authorized to accept

delivery and service of "communications"[60] that are issued by or on behalf of the Commission. IPE will obtain the foregoing appointment before it permits the relevant member to operate pursuant to the no-action relief and will maintain the appointment as long as the relevant member is operating pursuant to that relief. IPE will make such appointments available to the Commission upon the request of a Commission representative.

- IPE will require each current and future Exchange member who is not registered with the Commission as an FCM to file with IPE a written representation, executed by a person with the authority to bind the member, stating that, as long as the IPE member operates pursuant to the no-action relief provided herein, the IPE member will provide, upon the request of the Commission, the United States Department of Justice, and, if appropriate, the NFA, prompt access to original books and records maintained at its United States offices as well as to the premises where ETS is installed or used in the United States. IPE will obtain the foregoing representation before it permits the relevant member to operate pursuant to the no-action relief and will maintain the representation as long as the relevant member is operating pursuant to that relief. IPE will make such representations available to the Commission upon the request of a Commission representative.
- IPE will file with the Division valid and binding appointment of a United States agent for service of process in the United States, pursuant to which the agent is authorized to accept delivery and service of "communications," as defined above, that are issued by or on behalf of the Commission. IPE will file the foregoing representation before it operates pursuant to the no-action relief and will maintain the representation as long as IPE or ETS operate pursuant to that relief.
- IPE will maintain the following updated information and submit such information to the Division on at least a quarterly basis, and at any time promptly upon the request of a Commission representative:
- For each contract available to be traded through ETS, the total trade volume originating from ETS terminals assigned to each of IPE's members in the United States (including volume originating from AORSs that route orders to ETS) compared with total trade worldwide volume for such products traded through ETS and the total worldwide trade volume for such products traded on IPE generally.
- A listing of the names, NFA ID numbers (if applicable) and main business addresses in the United States of all IPE members that have access to ETS in the United States.
- IPE will promptly provide the Division with written notice of the following:
- Any material change in the information provided in its No-Action Request, including any information contained in the documents submitted in support thereof.[61]
- Any material change in IPE Regulations or the laws, rules, and regulations in the United Kingdom relevant to futures and options.
- Any matter known to IPE or its representatives that, in IPE's judgment, may affect the financial or operational viability of IPE; including, but not limited to, any significant system failure or interruption.
- Any default, insolvency, or bankruptcy of any IPE member known to IPE or its representatives that may have a material, adverse impact upon the condition of IPE, the IPE clearing system, or upon any United States customer or firm.
- Any known violation by IPE or any IPE member of the terms or conditions of the no-action relief provided herein.
- Any disciplinary action taken by IPE against any member of IPE operating pursuant to the no-action relief provided herein that: (i) involves any market manipulation, fraud, deceit, or conversion or that results in suspension or expulsion; (ii) involves the use of ETS or an AORS to submit orders to ETS; and (iii) either: (a) the IPE member against whom the disciplinary action is taken is located or based in the United States or (b) the disciplinary action results, in whole or in part, from conduct that: (1) involves the use of a terminal or an AORS that is located in the United States to accept or submit an order for trading through ETS; (2) involves a United States customer or firm or a registered FCM; or (3) might have a material, adverse impact upon any United States

customer or firm.[62]
- Satisfactory information-sharing arrangements between the Commission and the FSA will remain in effect.
- The Commission will be able to obtain sufficient information regarding IPE and the members of IPE operating pursuant to the no-action relief provided herein necessary to evaluate the continued eligibility of IPE or its members for the relief, to enforce compliance with the terms and conditions of that relief, or to enable the Commission to carry out its duties under the CEA and Commission regulations.[63]
- IPE will provide directly to the Commission information necessary to evaluate the continued eligibility of IPE or its members for the relief, to enforce compliance with the terms and conditions of that relief, or to enable the Commission to carry out its duties under the CEA and Commission regulations.[64]
- IPE employs reasonable procedures, to be determined by IPE, for monitoring and enforcing compliance with the terms and conditions of the no-action relief provided herein.

The no-action position taken herein is taken by the Division only and does not necessarily reflect the views of the Commission or any other unit or member of the Commission's staff. It is based upon the information and representations contained in IPE's No-Action Request and the materials submitted in support thereof. Any materially different, changed, or omitted facts or circumstances may render this letter void. The Division specifically notes that it will examine the trade volume information submitted as a condition to the no-action relief provided herein as well as any changes in the nature or extent of IPE's activities in the United States to ascertain whether IPE's presence in the United States has increased to a level that might warrant reconsideration of the no-action relief.

As with all no-action letters, the Division retains the authority to condition further, modify, suspend, terminate, or otherwise restrict the terms of the no-action relief provided herein, in its discretion. Finally, the Division wishes to emphasize that the no-action position set forth herein is intended to provide immediate, interim relief to IPE and its members, pending any adoption of rules or guidelines by the Commission regarding the use and placement in the United States of automated trading systems or AORSs that provide access to the products of foreign boards of trade. Thus, this letter will cease to be effective in the event that the Commission or its staff adopts generally applicable rules or general guidelines regarding the issues addressed herein, and IPE will be subject to those rules or guidelines in that event.

If you have any questions regarding this correspondence, please contact me or Jocelyn Barone at (202) 418-5450.

Very truly yours,

John C. Lawton
Acting Director
JBB/jb

cc: Daniel A. Driscoll, Vice-President-Compliance
National Futures Association
Henry J. Matecki, T&M, Chicago

[1] For purposes of the No-Action Request and the relief provided herein, references to the members of IPE shall include "affiliates" of such members to the extent that such affiliates are granted access by the member to ETS. An "affiliate" of an IPE member shall mean any person that: (i) owns 50% or more of the member; (ii) is owned 50% or more by the member; or (iii) is owned 50% or more by a third person that also owns 50% or more of the member. IPE represents that, to the extent an IPE member permits an affiliate to use ETS, such affiliate will be required to comply with all IPE Regulations and the IPE member will remain responsible to IPE for ensuring its affiliate's compliance with such regulations. For purposes of the No-Action Request and the relief provided herein, the term "IPE Regulations" shall include IPE's Memorandum and Articles of Association, Regulations, Floor and ETS Trading Procedures, and any circulars, notices, or similar instructions issued by IPE.

[2] For purposes of the relief provided herein, the term "United States" shall include the United States, its territories and possessions.

[3] For purposes of the No-Action Request and the relief provided herein, the term "proprietary account" shall have the meaning set forth in Rule 13(y). 17 C.F.R. § 1.3(y) (1999).

[4] Rule 30.10 permits a person affected by any of the requirements contained in Part 30 of the Commission's rules to petition the Commission for an exemption from such requirements. 17 C.F.R. § 30.10 (1999). Appendix A to the Part 30 rules provides an interpretative statement that clarifies that a foreign regulator or self-regulatory organization ("SRO") can petition the Commission under Rule 34.10 for an order to permit firms that are members of the SRO and subject to regulation by the foreign regulator to conduct business from locations outside of the United States for United States persons on non-United States boards of trade without registering under the Commodity Exchange Act, based upon the person's substituted compliance with a foreign regulatory structure found comparable to that administered by the Commission under the Act. *Interpretative Statement with Respect to the Commission's Exemptive Authority Under § 30.10 of its Rules*, 17 C.F.R. pt. 30, Appendix A (1999).

[5] For purposes of the No-Action Request and the relief provided herein, the term "United States customers" shall have the same meaning as the term "foreign futures or foreign options customers" as it is defined in Rule 30.1(c). 17 C.F.R. § 30.1(c) (1999).

[6] In its No-Action Request, IPE defines the term "AORS" to mean "any system of computers, software or other devices that allows entry of orders through another party for transmission to a board of trade's computer or other automated device where, without substantial human intervention, trade matching or execution takes place."

[7] 7 U.S.C. §§ 1 et seq. (1994).

[8] *Access to Automated Boards of Trade*, 64 Fed. Reg. 14159 (proposed March 24, 1999), *withdrawn*, June 2, 1999.

[9] *Order of the CFTC Withdrawing Proposed Rules Regarding Access to Automated Boards of Trade*, Release No. 4274-99 (June 2, 1999).

[10] References to the Financial Services and Markets Bill in this letter refer to the draft Financial Services and Markets Bill that was published by Her Majesty's Treasury ("HMT") for public comment on July 30, 1998 and submitted to an all-party committee of Parliament on June 17, 1999. The committee has returned the draft to HMT for further revision and later submission to the full Parliament. The

Financial Services and Markets Bill will give effect to the proposals to reform the financial services regulatory structure in the United Kingdom that were announced in May 1997.

[11] As stated below, the no-action relief provided herein is contingent upon the accuracy of the representations made by IPE in support of the No-Action Request. Any materially different, changed, or omitted facts or circumstances may render the no-action relief void or cause the Division, in its discretion, to condition further, modify, suspend, terminate, or otherwise restrict the relief.

[12] Specifically, IPE offers Natural Gas (NBP) Daily futures contracts, Natural Gas (NBP) Monthly futures contracts, and Natural Gas (NBP) Balance-of-the-Month futures contracts.

[13] ETS Workstations and other aspects of the ETS architecture are discussed in Section III.

[14] IPE has received other regulatory approval for or a statement of no-objection to the placement of ETS Workstations in Austria, Belgium, Finland, Germany, Greece, the Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland.. IPE anticipates imminent approval from Denmark and France. No jurisdiction has denied a request by IPE for an approval or a statement of no objection of this kind.

[15] IPE represents that its marketing efforts are directed towards institutions. IPE does not intend to solicit individual Exchange users.

[16] IPE Regulations permit Floor Members and Local Floor Members to lease their trading seats. However, IPE represents that a lessee is required to comply with all of the membership requirements applicable to the lessor member.

[17] As discussed in Section IV, all IPE members that intend to conduct investment business in the United Kingdom must be authorized to conduct investment business in the United Kingdom or be eligible for an exemption from the authorization requirement. IPE members that intend to conduct investment business from an overseas location similarly must be authorized or otherwise licensed or permitted by the appropriate regulatory body in their home country to conduct investment business on the Exchange from that location.

[18] For information purposes only, the Division has indicated the United States dollar equivalent of any sum of United Kingdom pounds referenced herein, based upon the exchange rate of November 1, 1999 (£1 = $1.64). The Division notes, however, that the financial resource requirements for IPE membership are not limited in any way to the United States dollar equivalents that have been provided in this letter.

[19] As discussed in Section IV, the SFA is an SRO charged with the oversight of futures and options market intermediaries. The SFA has delegated its monitoring responsibilities to the Financial Services Authority ("FSA"), the regulatory body that is responsible for regulating the conduct of investment business in the United Kingdom.

[20] United Kingdom law requires IPE to have adequate arrangements for the clearing and settlement of contracts executed on the Exchange. IPE achieves this through its contractual arrangement with LCH.

[21] IPE requires that all trades made by IPE members through its trading facilities be cleared. Accordingly, all members must have a guaranteed route to clearing. A Non-Clearing Member may be a party to only one clearing arrangement.

[22] IPE has agreed to fix the financial obligations of its Clearing Members at the same level as the financial resources requirements that LCH imposes upon such members.

[23] Before an IPE member can trade contracts on ETS, the address at which its ETS Workstation will be installed must be approved, in writing, by the Exchange's Membership and Rules Committees and the member must be a party to an agreement in a form prescribed by the Directors for the supply or license by the Exchange of the ETS Workstation to the member at the approved address. Members are prohibited from moving or installing an ETS Workstation to a new address, absent the prior written consent of the Membership and Rules Committees.

[24] ETS Traders must submit all orders in the name of the IPE member for whom they trade and must trade, at all times, in the name of and on behalf of that member. The IPE member is responsible for all orders and other instructions entered and all trades made by its ETS Traders or on ETS from an ETS Workstation located at the member's premises or any other premises agreed upon by the Exchange. All trades made on IPE by a member's ETS Traders or through an ETS Workstation to which the member has access are binding upon the member, regardless of whether the trade was authorized by the member or is permitted by IPE Regulations. The IPE member may also be held accountable for the behavior of its ETS Traders in executing such trades.

[25] IPE restricts the number of ETS Traders that may have access to ETS at any one point in time.

[26] The training program and competency examination are administered by IPE.

[27] The Trading Host assigns each ETS Trader at least one ITM. An ETS Trader may not trade contracts on a particular market and acquire data about such contracts (except publicly available information) unless the IPE member for whom he is trading is privileged to trade in that market. For example, an ETS Trader may not trade any contract in a jurisdiction in which the contract has not been approved for trading in that jurisdiction. When an ETS Trader obtains access to the Trading Host, the Trading Host uses the ITM to identify the trader and block him from accessing contracts that he may not trade. Accordingly, ETS Traders located in the United States would not be able to access products from ETS terminals located in the United States that are not authorized pursuant to the no-action relief provided herein.

[28] Although IPE currently does not permit customers to access ETS via an AORS, it intends to do so in the future. IPE represents that, in that event, Exchange members that provide, use, or accept orders from an AORS for the purpose of submitting orders to ETS would be required to comply with certain order validation and recording requirements as well as IPE Regulations. For example, IPE members would be required to maintain control over order-routed business to ensure that all orders are properly vetted and to ensure that adequate checks are performed before orders are submitted to the Trading Host.

[29] The role of IPE Supervisors is discussed in greater detail in Section IV.

[30] ETS represents that cross trade orders will be executed in a manner similar to the way in which they are executed on Globex, although the designated time during which the market must be shown both the buy and sell side of the order and during which either side may be traded is shorter on ETS than it is on Globex.

[31] Although contracts executed on ETS are matched automatically, IPE members must assign specific trades to a house or customer account for position-keeping purposes or allocate the trade to another

member. Trades that have not been assigned or allocated are allocated automatically to the member's default accounts during the overnight clearing process and may be resolved on the next trading day. When such trades are resolved, the CPS position-keeping accounts are updated to reflect the corrections.

[32] IPE permits ETS Traders to record order details in written or electronic form, but requires them to maintain a physical original of the details.

[33] IPE members are required to have a time-stamping machine or an approved electronic order recorder capable of performing a similar time-stamping function at all locations where orders are received.

[34] The United Kingdom was one of eight jurisdictions that participated in Working Party 7 of IOSCO ("Working Party") whose mandate included, among other things, the identification of issues related to screen-based trading systems for derivative products. In considering the special concerns for screen-based trading systems, the Working Party identified and addressed the following issues: transparency, order execution algorithms, operational issues, security and system vulnerability, access, financial integrity, disclosure, and the role of system providers. The Working Party considered these issues and articulated for each a broad principle to assist regulatory authorities in overseeing screen-based trading systems. The IOSCO Principles were adopted by IOSCO on November 15, 1990 and set out in broad terms the international consensus as to the regulatory considerations to be addressed in reviewing mechanisms for cross-border screen-based trading. The Commission adopted the IOSCO Principles as a statement of regulatory policy for the oversight of screen-based trading systems for derivative products on November 21, 1990. *Policy Statement Concerning the Oversight of Screen-Based Trading Systems*, 55 Fed. Reg. 48670 (Nov. 21, 1990). The Securities and Investments Board ("SIB"), the predecessor to the FSA, endorsed the IOSCO Principles in April 1991. *SIB Endorsement of IOSCO's Principles for the Oversight of Screen-Based Trading Systems for Derivative Products*, Guidance Release 2/91 (April 1991).

[35] Violations of the FS Act are criminal offenses.

[36] The failure to comply with the FSA Principles could give rise to disciplinary action.

[37] On April 5, 1991, the Commission issued a supplemental order confirming the continued validity of such previous orders following the merger of the AFBD and the TSA into the SFA. On March 7, 1997, the Commission issued an additional order to the SFA clarifying the procedures set forth in its prior orders regarding United Kingdom exchanges and their members.

[38] Designated Investment Exchanges ("DIEs") are those non-United States exchanges that have been identified by the SIB to the Commission in connection with the CFTC's grant of exemptive relief pursuant to Rule 30.10. As an RIE, IPE is included in the SIB's (now the FSA's) list of DIEs.

[39] Among the issues considered by the Commission in determining whether to grant Rule 30.10 relief to a foreign regulatory authority or SRO are the authority's: (i) requirements relating to the registration, authorization, or other form of licensing, fitness review, or qualification of persons through whom customer orders are solicited and accepted; (ii) minimum financial requirements for those persons that accept customer funds; (iii) minimum sales practice standards, including risk disclosures, and the risk of transactions undertaken outside of the United States; (iv) procedures for auditing compliance with the requirements of the regulatory program, including recordkeeping and reporting requirements; (v) standards for the protection of customer funds from misapplication; and (vi) arrangements for the sharing of information with the United States. *Interpretative Statement with Respect to the Commission's*

Exemptive Authority Under § 30.10 of its Rules, 17 C.F.R. pt. 30, Appendix A (1999).

[40] As stated below, the Division notes that nothing in the no-action relief provided herein abrogates or otherwise alters the obligations of FCMs or Rule 30.10 Firms under the CEA, Commission rules, or relevant Part 30 orders.

[41] Under the FS Act, the status of an RIE is similar in some respects to that of an SRO. That is, it is recognized by the FSA, is subject to statutory requirements, and is responsible for regulating the activities of its members. However, the function of RIEs and SROs differ in that RIEs are responsible for ensuring that their markets function fairly and efficiently, while SROs are responsible for authorizing firms to conduct investment business.

[42] The FS Act defines investment activities to include, among other things, dealing, arranging deals, managing, giving investment advice, and establishing or operating a collective investment scheme in or in relation to a range of investments, including securities, options, and futures.

[43] The FS Act prohibits individuals and entities from carrying on "investment business" in the United Kingdom unless they are either "authorized" to do so or are eligible for an exemption from the authorization requirement. Authorization may be obtained from the FSA directly or by, membership in an SRO or, in certain instances, a professional body recognized by the FSA under the FS Act. The FS Act imposes criminal sanctions upon persons who violate this requirement. While agreements made by or through persons who have not been authorized to conduct investment husiness as required may be enforced by customers, they are not enforceable on the part of the unauthorized person.

[44] The FS Act permits an RIE to delegate these functions to a Recognized Clearing House ("RCH"). IPE has delegated them to LCH.

[45] An RIE's obligation to cooperate with other regulatory bodies is not limited to cooperation with regulatory authorities in the United Kingdom. The SIB's Guidance Release entitled "Standards for regulation of RIEs" specifically provides, among other things, that an RIE should cooperate with the appropriate regulators (including overseas regulators and authorities), market authorities, and other relevant bodies.

[46] Dealings by a person who does not carry on investment business from a permanent place of business in the United Kingdom ("Overseas Person") with a person who has been authorized to conduct investment business in the United Kingdom or who has been exempted from that requirement are among the "excluded activities" that are not regarded as "investment business in the United Kingdom" under the FS Act. Accordingly, an Overseas Person is able to deal with a regulated firm in the United Kingdom without being required to be licensed in the United Kingdom. IPE members dealing on IPE through ETS from outside of the United Kingdom ("Remote IPE Members") can take advantage of this exclusion and, therefore, do not need to be licensed under the FS Act.

IPE represents that there are no Remote IPE Members that trade on IPE at the present time, although a small number of such firms belong to a sub-category of TAMS that have no trading or clearing rights. IPE represents that it will not allow foreign entities to transact business directly on IPE unless, among other things, it is satisfied that: (i) IPE Regulations are being enforced; (ii) IPE and the FSA have good working relationships with the regulator that is responsible for authorizing and supervising the member; (iii) the relevant foreign regulator is willing and able to cooperate with IPE and the FSA through the exchange of regulatory information; (iv) the member can perform its desired roles with respect to IPE business without the necessity of a United Kingdom presence; and (v) the member's ETS Traders will be available during and after the trading session in London to assist in, among other things, resolving disputes about trades. In any event, as noted, IPE members transacting business with United States customers are required to be registered as FCMs or operating pursuant to Rule 30.10 orders or other applicable exemptive relief whether such members are based within the United Kingdom or outside of the United Kingdom.

[47] Pursuant to the Financial Services and Markets Bill, as currently drafted, the FSA will acquire the powers of the SROs once the relevant portions of the bill become effective. This is expected to occur sometime in the year 2000. Pending implementation of the bill, the Board of each SRO continues to be legally responsible for the regulation of its members (*e.g.*, the SFA will continue to be responsible for the regulation of futures and options intermediaries). However, the SRO Boards have delegated some of their functions to the FSA, including the function of monitoring regulated firms. Accordingly, the FSA is now operationally responsible for monitoring compliance with SFA rules.

[48] Only those persons who have worked extensively in the industry or who have passed an examination of an equivalent standard may be exempt from the examination requirement.

[49] As noted above, the FSA now monitors compliance with these rules.

[50] IPE's minimum financial resource requirements are in addition to those that may be imposed by the member's SRO.

[51] All good faith actions taken by RIEs or RCHs under their respective default rules (e.g., closing out positions) are protected from the normal workings of United Kingdom insolvency law. That is, while an RIE's or RCH's action in the event of a default may be challenged by a liquidator or insolvency official, the RIE or RCH generally will be granted immunity if the action was taken in good faith.

[52] For example, IPE Supervisors are authorized to conduct spot checks to verify the authenticity of orders and trades, to scrutinize each order submitted for execution on the Exchange (from its initial placement by a member through its assignment to a counterparty), and to request written evidence of details relating to a transaction or order from an IPE member.

[53] IPE notes that its members are obligated to immediately notify IPE of any actual infringement of IPE Regulations or of any actual financial or commercial difficulty on their part or any member or person subject to IPE Regulations.

[54] The Division notes that the FSA has confirmed that these information-sharing arrangements would extend to information requested by the CFTC in connection with the no-action relief provided herein. Letter from Matthew Elderfield, Head of Department, Exchanges and Clearing Houses, The Financial Services Authority, to I. Michael Greenberger, Director, Division of Trading and Markets, Commodity Futures Trading Commission (July 23, 1999). The Division also notes that the IPE is a signatory to a companion MoU to the Boca Declaration that provides for the sharing of information between market authorities upon the occurrence of certain triggering events.

[55] *Order of the CFTC Withdrawing Proposed Rules Regarding Access to Automated Boards of Trade*, Release No. 4274-99 (June 2, 1999).

[56] The Division notes that the foregoing is not intended to be an exhaustive list of the factors relevant to

its decision to grant the no-action relief requested by IPE nor of the factors that the Division might consider when analyzing no-action requests from other exchanges. No-action requests, by their nature, require case-by-case evaluation and the Division's conclusion regarding any particular no-action request will be based upon the facts and circumstances presented at the time of its review of that request.

[57] *See* CFTC Interpretative Letter No. 88-15, Comm. Fut. L. Rep. (CCH) ¶24,296 (Aug. 10, 1988).

[58] *See* CFTC Interpretative Letter No. 87-7, Comm. Fut. L. Rep. (CCH) 123,972 (Nov. 17, 1987).

[59] As stated above, "members" includes those persons identified in footnote I for purpose of this no-action letter and the conditions imposed upon the relief provided herein.

[60] For purposes of these conditions, "communications" is defined to include any summons, complaint, order, subpoena, request for information, or notice or any other written or electronic documentation or correspondence issued on behalf of the Commission.

[61] The Division notes that "material" changes in the information provided to it in support of this No-Action Request would include; without limitation, a modification of IPE's membership criteria; the location of IPE's management, personnel, or operations (particularly changes that may suggest an increased nexus between IPE's activities and the United States); the basic structure, nature, or operation of ETS; or the regulatory or self-regulatory structure applicable to IPE, ETS, or IPE or ETS participants (*e.g.*, the passage of the Financial Services and Markets Bill into law and the implementation of relevant regulations, advisories, or directives promulgated thereunder).

[62] The Division notes that the language of this condition incorporates the language contained in the Division's letter to the FSA clarifying the conditions imposed upon similar relief that the Division granted to LIFFE Administration and Management by letter dated July 23, 1999. Letter from John C. Lawton, Acting Director, Division of Trading and Markets, Commodity Futures Trading Commission, to Gay Wisbey, Director, Markets and Exchanges Division, The Financial Services Authority (Sept. 30, 1999) ("Sept. 30 Letter").

[63] The Division notes that it will request the information referenced in this provision, in the first instance, from the FSA and that this condition will be satisfied if the FSA provides the Commission with all information requested. *See* Sept. 30 Letter.

[64] The Division notes that it will request the information referenced in this provision, in the first instance, from the FSA and that this condition will be satisfied if the FSA provides the Commission with all information requested. *See* Sept. 30 Letter.

Updated March 29, 2006

[Federal Register: November 2, 2006 (Volume 71, Number 212)]
[Rules and Regulations]
[Page 64443-64451]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr02no06-3]

COMMODITY FUTURES TRADING COMMISSION

17 CFR Part 140

Boards of Trade Located Outside of the United States and No-Action Relief From the Requirement To Become a Designated Contract Market or Derivatives Transaction Execution Facility

AGENCY: Commodity Futures Trading Commission.

ACTION: Policy statement.

SUMMARY: The Commodity Futures Trading Commission is issuing a Statement of Policy that affirms the use of the no-action process to permit foreign boards of trade to provide direct access to their electronic trading systems to U.S. members or authorized participants, and provides additional guidance and procedural enhancements.\1\

\1\ Commission Rule 140.12, 17 CFR Sec. 140.12 Disposition of business by seriatim Commission consideration.

DATES: Effective Date: November 2, 2006.

FOR FURTHER INFORMATION CONTACT: Robert Rosenfeld, Deputy Director, Office of International Affairs, 202-418-5423, rrosenfeld@cftc.gov; Julian Hammar, Counsel, Office of the General Counsel, 202-418-5118, jhammar@cftc.gov; or Duane Andresen, Special Counsel, Division of Market Oversight, 202-418-5492, dandresen@cftc.gov, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW., Washington, DC 20581.

SUPPLEMENTARY INFORMATION:

Background

Since 1996, staff of the Commodity Futures Trading Commission (CFTC or Commission) has issued no-action letters \2\ to foreign boards of trade stating, subject to compliance with certain conditions, that it will not recommend that the Commission take enforcement action if the foreign board of trade provides its members or participants in the United States access to its electronic trading system without seeking designation under the Commodity Exchange Act (CEA or Act) as a contract market (DCM) or registration as a derivatives transaction execution facility (DTEF).\3\ In 1998 the Commission imposed a moratorium on the issuance of such no-action letters pending the development of rules governing access to automated foreign boards of trade.\4\ During this period, the Commission received extensive comment on the proposed rulemaking, as well as advice from the Commission's Global Markets Advisory Committee and a Public Round Table. Because of the general lack of consensus on many of the fundamental issues surrounding access to foreign boards of trade, the Commission withdrew the proposed rules in an order that also directed the staff:

\2\ See Commission Rule 140.99, 17 CFR 140.99 (2006), which defines the term "no-action letter" as a written statement issued by the staff of a Division of the Commission or of the Office of the General Counsel that it will not recommend enforcement action to the Commission for failure to comply with a specific provision of the Act or of a Commission rule, regulation or order if a proposed transaction is completed or a proposed activity is conducted by the beneficiary.

\3\ These letters, hereinafter referred to generally as "no-action letters" are published on the Commission's Web site at: http://www.cftc.gov/dea/deaforeignterminaltable.htm.
Reference to DTEFs in the no-action letters was added following the establishment of that category by the Commodity Futures Modernization Act of 2000.

Although the letters refer to the placement of "terminals," the continued use of that term does not accurately reflect advances in technology, such as open network systems accessible through the Internet.

\4\ 63 FR 39779 (July 24, 1998) (Concept Release); 64 FR 14159 (March 24, 1999) (Proposed Rules). Under the terms of a letter dated June 3, 1998 to Eurex Deutschland, the Division of Trading and Markets modified the terms of the original 1996 no-action letter to the effect that Eurex members who were not already operating U.S.-based Eurex Terminals generally were prevented from placing Eurex terminals in the U.S. absent written authorization from the Division, pending adoption of Commission rules regarding electronic access to foreign exchanges.

To begin immediately processing no-action requests from foreign boards of trade seeking to place trading terminals in the United States, and to issue responses where appropriate, pursuant to the general guidelines included in the Eurex (DTB) no-action process, or other guidelines established by the Commission, to be reviewed and applied as appropriate on a case-by-case basis.\5\

\5\ Commission Order dated June 2, 1999, 64 FR 32829, 32830 (June 18, 1999). The Eurex-DTB no-action process referred to by the Commission in its 1999 Order lifting the moratorium was set forth in a letter dated February 29, 1996 from Andrea Corcoran, Director, Division of Trading and Markets to Lawrence Hunt, Jr., pp. 12-13 (the DTB no-action letter). CFTC Letter 96-28, indexed at http://www.cftc.gov/opa/summaries/opanal96.htm; [1994-1995 Transfer Binder] Comm. Fut. L. Rep. (CCH)] 26,669 at 43,795-43,802 (February 29, 1996). On June 18, 1998, the DTB changed its name to Eurex Deutschland, a step toward a planned merger with the Swiss Options and Financial Futures Exchange. See 63 FR 39779, 39781 (July 24, 1998) at fn. 12.

[[Page 64444]]

Following the lifting of the moratorium in 1999, the relevant Commission operating division has issued seventeen additional no-action letters.\6\ The Commission generally has not observed regulatory problems or financial harm to participants who are accessing the foreign boards of trade pursuant to the staff no-action relief letters. Moreover, the no-action process has been resilient throughout a period of increasing global competition, technological advances, changing ownership structures and evolving business models.

\6\ The Commission's Division of Market Oversight (successor to the market supervisory responsibilities previously performed by the Division of Trading and Markets) is responsible for issuance of the direct access no-action letters.

In 2006, ICE Futures, a U.K. registered investment exchange that provides direct access to its U.S. members pursuant to a CFTC staff foreign terminal no-action letter, notified the Commission that it would list a contract on West Texas Intermediate light sweet crude oil whose settlement price would be linked to contracts traded on the New York Mercantile Exchange (NYMEX). ICE's notification prompted the Commission's Division of Market Oversight (DMO) to advise ICE Futures that the "Commission will be evaluating the use of the no-action process in light of significant issues raised by the factual circumstances underlying the subject notice." \7\ Among other things, the trading of such contracts made ripe the re-examination of certain dormant issues respecting the Commission's statutory obligations to maintain the integrity of U.S. markets and to protect U.S. customers, particularly the Commission's market surveillance obligations. Accordingly, on May 3, 2006, the Commission directed its staff to initiate a formal process to define what constitutes a "board of trade, exchange, or market located outside the United States, its territories or possessions" as that phrase is used in section 4(a) of the CEA and in furtherance of that process scheduled a public hearing.\8\ The Commission also issued a related Request for Public Comment.\9\

\7\ See letter dated January 31, 2006 from Richard A. Shilts, Director, Division of Market Oversight to Mark Woodward, Regulation and Compliance Policy Manager, ICE Futures. http://www.cftc.gov/files/dea/cftclettertoicefutures.pdf.

\8\ See Sunshine Act Meeting Notice, 71 FR 30665 (May 30, 2006); corrected at 71 FR 32059 (June 2, 2006). The hearing was conducted on June 27, 2006, at the Commission's headquarters in Washington, DC.

\9\ See 71 FR 34070 (June 13, 2006). The Commission requested comment on the issues related to developing an objective standard establishing a threshold that, if crossed by a foreign board of trade that permits direct access, would indicate that the board of trade is no longer outside the United States and, accordingly, may be required to become registered under the CEA.

Hearing and Request for Comment

Participants at the Commission's Hearing and comments submitted in response to the Request for Comment (all collectively the "commenters"),\10\ were generally supportive of the no-action process, praising the process in general for its flexibility.\11\ Many commenters suggested that the Commission should retain in large measure the essential contours of the no-action process.\12\

\10\ A transcript of the Commission's Hearing on what constitutes a board of trade located outside the United States under the Commodity Exchange Act section 4(a) (June 27, 2006), ("Hearing Tr.") as well as all comment letters ("CL"), are located in comment file 06-002 to 17 FR 34070 (June 13, 2006). http://www.cftc.gov/foia/comment06/foi06-002_1.htm.

\11\ For comments supporting the no-action letter process generally, see, e.g., Comments of Nicholas Weinreb, Euronext, Hearing Tr. at 45 ("The no-action letter regime has been an extraordinarily successful one."); comments of Benn Steil, Director of International Economics, Council of Foreign Relations, in his personal capacity, Hearing Tr. at 49 ("I think it is exceptionally important to acknowledge just how successful the Commission's no-action regime has been * * *"); For favorable hearing participant comments on the flexibility of the no-action letter process, see, e.g., Comments of John Foyle, Euronext Liffe, Hearing Tr. at 46; Comments of Richard Berliand, JP Morgan Securities, Hearing Tr. at 61; Comments of Nicholas Weinreb, Euronext, Hearing Tr. at 174.

\12\ See, e.g., CL 2 (New York Board of Trade) at 3; CL 3 (Council of Foreign Relations) at 2; CL 6 (ICE Futures Exchange) at 9-10; CL 7 (Minneapolis Grain Exchange) at 2; CL 8 (Bundesanstalt f[uuml]r Finanzdienstleitungsaufsicht) at 3; CL 16 (World Federation of Exchanges) at 1; CL 19 (Tokyo Stock Exchange) at 2; CL 22 (Federation of European Securities Exchanges) at 4; CL 23 (Eurex Deutschland) at 11; CL 24 (Euronext Liffe) at 5; CL 25 (Chicago Board of Trade) at 1; CL 28 (Futures Industry Association) at 9; and CL 45 (Committee of European Securities Regulators) at 1.

Commenters warned against any mechanistic approaches to determining whether an otherwise foreign organized exchange that permits direct electronic access by its U.S. members or participants is not located "outside" the United States for purposes of section 4(a) of the CEA, particularly questioned the use of volume as a proxy for U.S. presence (noting that its fluctuations could result in regulatory uncertainty), and stressed the need to avoid rigid or "bright line" tests.\13\ Some commenters favored a totality of circumstances approach to location,\14\ while others urged the Commission to look to indicators of physical location, such as the main location of an exchange's infrastructure, its employees and headquarters.\15\

\13\ See, e.g., CL 2 (New York Board of Trade) at 2-3; CL 6 (ICE Futures Exchange) at 6-7; CL 9 (Chicago Mercantile Exchange) at 6; CL 23 (Eurex Deutschland) at 7; CL 25 (Chicago Board of Trade) at 9-10.

\14\ See, e.g., CL 22 (Federation of European Securities Exchanges) at 3.

\15\ See, e.g., CL 6 (ICE Futures) at 2; CL 9 (Chicago Mercantile Exchange) at 6.

Market users stressed the need to maintain high levels of customer and market protections, particularly where a product might impact pricing in U.S. markets.\16\ Many U.S. exchanges requested that the Commission give greater attention to competitive issues, particularly when there is direct competition between a U.S. exchange and a foreign exchange's products. U.S. exchanges in particular stressed the need for "regulatory parity." \17\ Some commenters warned against taking actions that inadvertently could result in policies that may inhibit the ability of U.S. exchanges and firms to operate globally.\18\ Others stressed the need to provide regulatory certainty generally with respect to the applicability of the no-action process and to clarify the treatment of intermediated electronic access.\19\

\16\ See, e.g., CL 5 (New England Fuel Institute) at 2; CL 27 (Industrial Energy Consumers of America) at 1.

\17\ See, e.g., CL 7 (Minneapolis Grain Exchange) at 1; CL 25 (Chicago Board of Trade) at 5-6; and CL 43 (New York Mercantile Exchange) at 10.

\18\ See, e.g., CL 2 (New York Board of Trade) at 3.

\19\ See, e.g., CL 28 (Futures Industry Association) at 8.

Need for the Policy Statement

As made clear at the Hearing and by the written comments, the intensity of concerns with respect to the no-action process has been exacerbated by the global competitive environment. In particular, these concerns have called into question: (1) The Commission's authority for the no-action process in light of Section 4(a)'s exclusion from the contract market designation requirement for foreign boards of trade, (2) the continued appropriateness of the no-action process generally, (3) whether objective threshold standards should be developed that would indicate that a board of trade is no longer located outside the United States for purposes of section 4(a) of the CEA, (4) whether enhancements to the no-action process may be necessary, particularly where trading may implicate domestic futures and cash markets, and (5) how the no-action process relates to perceived competitive issues.

[[Page 64445]]

Continued ambiguity with respect to these fundamental issues could result in an unacceptable degree of uncertainty that may hinder access by U.S. users to global products and markets, inhibit continued innovation in technology and products, and undermine the ability of U.S. markets and intermediaries to structure their business to compete globally. Accordingly, the Commission is issuing this Statement of Policy in order to provide greater regulatory certainty and transparency to issues surrounding access to foreign boards of trade.

Statement of Policy Regarding the Processing of No-Action Requests by Foreign Boards of Trade to Provide Direct Electronic Access to Their U.S. Members or Authorized Participants

Since 1996, foreign boards of trade planning to permit members or other participants located in the United States to enter trades directly into that foreign board of trade's trade matching system ("direct access") \20\ have sought staff no-action letters.

\20\ For purposes of this Statement of Policy, the term "direct access" refers to the explicit grant of authority by a foreign board of trade to an identified member or other participant of that board of trade to enter trades directly into the board of trade's trade matching system.

In contrast, the staff no-action letters generally have defined the term "automated order routing systems" (AORS) as meaning any system of computers, software or other devices that allows entry of orders through another party (an intermediary) who has been granted direct access for transmission to the trading system where, without substantial human intervention, trade matching or execution takes place.

The Commission does not view the transmission of intermediated orders via AORSs for execution on a foreign board of trade to be "direct access" to that board of trade for purposes of the no-action process.

In this regard, the Commission endorses the view that mere intermediated electronic access by AORS does not create a presence in the U.S., such that a firm exempted from registration as a futures commission merchant (FCM) pursuant to Commission Regulation 30.10, which is prohibited from establishing a U.S. presence, would be required to register as an FCM. See, e.g., CFTC Staff Letter No. 05-16 [Current Transfer Binder] Comm. Fut. L. Rep. (CCH)] 30,127 (Aug. 26, 2005) ("For example, Rule 30.10 Firms continue to be prohibited from maintaining a presence in the United States. Thus, Rule 30.10 Firms cannot provide direct access to LIFFE CONNECT[reg] in the United States (although they would be permitted to accept orders overseas from customers located in the United States that submit such orders by telephone or through an AORS located in the

United States").) (Emphasis added.)

This position is consistent with the Commission's historical policy of addressing customer protection concerns with regard to the offer or sale of foreign futures to U.S. customers primarily through regulation of the intermediary. In this regard, nothing in the Statement of Policy is intended to alter current Commission rules that require that any person engaging in the offer or sale of a foreign futures contract or foreign futures option transaction for or on behalf of a U.S. customer must be a registered futures commission merchant or operating pursuant to a Rule 30.10 Order.

This Statement of Policy provides guidance for processing requests for no-action relief. The Commission intends that this Statement of Policy will ensure the consistent treatment of requests and the application of an appropriate degree of review, while maintaining the ability to respond to the individual factual circumstances raised by particular requests.

The Commission's Statement of Policy takes into account the Commission's desire to facilitate access to markets and products, foster innovation and competition and eliminate unnecessary regulatory burdens, while maintaining customer and market protections mandated by the CEA. The adoption by the Commission of such a flexible and adaptable policy is consistent with Congressional findings that accompanied the enactment of the Commodity Futures Modernization Act of 2000 (CFMA).\21\

\21\ Section 126(a) of the CFMA, Appendix E of Pub. L. No. 106-554, 114 Stat. 2763 (2000), provides:

"SEC. 126. INTERNATIONAL ACTIVITIES OF THE COMMODITY FUTURES TRADING COMMISSION.

(a) FINDINGS.--The Congress finds that--

(1) derivatives markets serving United States industry are increasingly global in scope;

(2) developments in data processing and communications technologies enable users of risk management services to analyze and compare those services on a worldwide basis;

(3) financial services regulatory policy must be flexible to account for rapidly changing derivatives industry business practices;

(4) regulatory impediments to the operation of global business interests can compromise the competitiveness of United States businesses;

(5) events that disrupt financial markets and economies are often global in scope, require rapid regulatory response, and coordinated regulatory effort across international jurisdictions;

(6) through its membership in the International Organization of Securities Commissions, the Commodity Futures Trading Commission has promoted beneficial communication among market regulators and international regulatory cooperation; and

(7) the Commodity Futures Trading Commission and other United States financial regulators and self-regulatory organizations should continue to foster productive and cooperative working relationships with their counterparts in foreign jurisdictions."

I. The Commission's Authority for the No-Action Process

A. Relevant Statutory Considerations: The Commodity Exchange Act Circumscribes the Commission's Authority Over Foreign Boards of Trade

Section 4(a) of the CEA provides that a futures contract may be traded lawfully in the U.S. only if, among other things, it is traded on or subject to the rules of a board of trade that has been designated as a contract market or registered as a DTEF.\22\ Section 4(a) excludes from the designation requirement contracts made on or subject to the rules of a board of trade, exchange, or market located outside the United States, its territories or possessions." \23\

\22\ Section 4(a) of the CEA provides in part:

"Unless exempted by the Commission pursuant to subsection (c) of this section, it shall be unlawful for any person to offer to enter into, to enter into, to execute, to confirm the execution of, or to conduct any office or business anywhere in the United States, its territories or possessions, for the purpose of soliciting or accepting any order for, or otherwise dealing in, any transaction in, or in connection with, a contract for the purchase or sale of a commodity for future delivery (other than a contract which is made on or subject to the rules of a board of trade, exchange, or market located outside the United States, its territories or possessions) (emphasis added)"

unless--

"(1) such transaction is conducted on or subject to the rules of a board of trade which has been designated or registered by the Commission as a contract market or derivatives transaction execution facility * * *."

7 U.S.C. 6(b) (2000).

\23\ In the absence of no-action relief, a board of trade, exchange or market that permits direct access by U.S. persons might be subject to Commission action for violation of, among other provisions, section 4(a) of the CEA, if it were not found to qualify for the exclusion from the DCM designation or DTEF registration requirement.

Section 4(b) of the CEA, which authorizes the Commission to adopt rules governing the offer and sale of foreign futures and options contracts, explicitly prohibits the Commission from adopting rules pursuant to that section that: (1) Require Commission approval of any contract, rule, regulation, or action of any foreign board of trade, exchange, or market, or clearinghouse for such board of trade, exchange, or market, or (2) govern in any way any rule or contract term or action of any foreign board of trade, exchange, or market, or clearinghouse for such board of trade, exchange, or market.\24\

\24\ Section 4(b) of the CEA provides:

"The Commission may adopt rules and regulations proscribing fraud and requiring minimum financial standards, the disclosure of risk, the filing of reports, the keeping of books and records, the safeguarding of customers' funds, and registration with the Commission by any person located in the United States, its territories or possessions, who engages in the offer or sale of any contract of sale of a commodity for future delivery that is made or to be made on or subject to the rules of a board of trade, exchange, or market located outside the United States, its territories or possessions. Such rules and regulations may impose different requirements for such persons depending upon the particular foreign board of trade, exchange, or market involved. No rule or regulation may be adopted by the Commission under this subsection that (1) requires Commission approval of any contract, rule, regulation, or action of any foreign board of trade, exchange, or market, or clearinghouse for such board of trade, exchange, or market, or (2) governs in any way any rule or contract term or action of any foreign board of trade, exchange, or market, or clearinghouse for such board of trade, exchange, or market."

7 U.S.C. 6(b) (2000).

[[Page 64446]]

B. Section 4(a)'s Exclusion From Contract Market Designation Applies Only With Respect to "Bona Fide" Boards of Trade

The Commission interprets the section 4(a) parenthetical exclusion from contract market designation for foreign boards of trade to apply only with respect to "bona fide" boards of trade. The term "bona fide" in this context refers to boards of trade that, among other things, possess the attributes of established, organized exchanges, adhere to appropriate rules prohibiting abusive trading practices, have been authorized by a regulatory process that examines customer and market protections and are subject to continued oversight by a regulator that has power to intervene in the market and share information with the Commission. In reaching this conclusion, the Commission relies on legislative history found in the Report of the Senate Committee on Agriculture, Nutrition, and Forestry,\25\ which discusses the addition of section 4(b) to the CEA. Specifically, the Report notes that:

\25\ S. Rep. 97-384, 97th Cong. 2d Sess. 46 (1982).

In addition, the rules and regulations developed under this provision [section 4(b)] are not intended to place the solicitation or acceptance of orders in the United States for bona fide foreign futures contracts at a comparative disadvantage with similar solicitation or acceptance of orders for domestic futures contracts. For example, rules which require the segregation of all or part of customers' funds in the United States would not be consistent with the intent of this provision when there is adequate evidence that such funds have been transferred to a bona fide market, clearinghouse, or market principal and are adequately safeguarded

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for the protection of U.S. residents. [emphasis added]

The Commission's conclusion in this regard is harmonious with previous Commission interpretations of "bona fide" exchange.\26\

\26\ See 63 FR 39779, 39788 (July 24, 1998). See also Compl. Count I, CFTC v. Topworth Int'l, Ltd., (No. 94-1256) (C.D. Cal.) (Feb. 2, 1994).

A commenter had questioned the appropriateness of applying a "bona fide" limitation on the application of section 4(a).\27\ However, in light of the legislative history quoted above, which the Commission previously has interpreted as limiting the exclusion from Section 4(a) to bona fide foreign boards of trade, we believe that the interpretation we adopt today is an appropriate and reasonable exercise of the Commission's powers to interpret and apply its governing statute, particularly when it implicates domestic conduct and possible effects on domestic persons and markets that the Commission is charged with protecting.

\27\ CL 9 (Chicago Mercantile Exchange) at 5.

II. The Appropriateness of the No-Action Process

A. The Commission Endorses the No-Action Process

The Commission endorses the continued use of the no-action process as an appropriate and flexible mechanism that should be used prospectively to facilitate direct access to the electronic trading system of a foreign board of trade by its U.S. members or authorized participants.\28\

\28\ We believe the no-action process to be an appropriate exercise of discretion committed to Commission staff, subject to appropriate Commission oversight. See Board of Trade of the City of Chicago v. SEC, 883 F.2d 525, 530 (7th Cir. 1989); 17 CFR 140.99. In this connection, the Commission is directing staff to continue to circulate through the Secretariat for the Commission's review on an "absent objection" basis, prior to issuance, all staff foreign board of trade no-action letters.

The no-action process is appropriate because it gives staff the flexibility to address the factual circumstances presented in the future, and to apply a consistent approach to reviewing applications for no-action relief in light of innovations in electronic trading and technology, evolving regulatory standards, and specific customer protection and market integrity concerns. This approach is consistent with the CFMA's goal of adopting a flexible regulatory policy that can account for rapidly changing derivatives industry business practices, a theme that also was voiced at the Commission's hearing and in the written comments. Among other things, Congress found in the CFMA that "financial services regulatory policy must be flexible to account for rapidly changing derivatives industry business practices." CFMA Section 126(a)(3). Moreover, Section 126(b) of the CFMA expresses the sense of Congress that the Commission coordinate with foreign regulatory authorities to encourage "the facilitation of cross-border transactions through the removal or lessening of any unnecessary legal or practical obstacles."

B. The Commission Endorses the Scope of Review of the No-Action Process

The scope of review that was established by Commission staff in the DTB no-action letter and refined in subsequent no-action letters \29\ focuses on establishing the "bona fide" status of the foreign board of trade and finding that no public interest would be adversely affected by persons in the U.S. directly accessing the foreign board of trade.\30\

\29\ Letter dated February 29, 1996 from Andrea Corcoran, Director, Division of Trading and Markets, to Lawrence Hunt, Jr., pp. 12-13 (the DTB no-action letter). CFTC Letter 96-28, indexed at http://www.cftc.gov/opa/summaries/opanal96.htm; [1994-1995 Transfer Binder] Comm. Fut. L. Rep. (CCH)] 26,669 at 43,795-43,802 (February 29, 1996).

\30\ In the 1996 DTB no-action letter staff concluded that the "the mere presence of terminals in the United States would not cause the Commission to deem any bona fide foreign exchange for which products are listed through that system to be a domestic exchange, that is, a board of trade designated as a contract market by the Commission pursuant to section 5 of the Act." (emphasis added)

In order to conclude that the DTB was a "bona fide" foreign board of trade, and therefore appropriately subject to the parenthetical exclusion for foreign boards of trade in section 4(a) of the CEA, staff generally examined the DTB's rules and the overall regulatory environment. The text of the DTB letter makes clear that staff recognized the prohibitions set out in section 4(b) of the CEA, but noted that "the relationship or interface between DTB's computer terminals and persons located in the United States may raise regulatory concerns that are unrelated to the internal operations of the DTB or its computer terminals in the United

States." Accordingly, the review set forth in the DTB letter also focused narrowly on the domestic implications for U.S. persons using the DTB direct access terminals (i.e., the system integrity and clearing review).

In general, staff reviews information and representations provided by the applicant that relate to, among other things, the rules and structure of the applicant exchange (with an emphasis on the exchange's financial integrity, market surveillance, trade practice and rule enforcement regime), various system integrity protections that govern the foreign board of trade's electronic trading system (using as a template the 1990 Principles for the Oversight of Screen-Based Trading Systems),\31\ the system's related clearing and customer default protections, and information concerning the regulatory structure in the applicant's jurisdiction, with a specific emphasis on market regulation.\32\ The staff also reviews the

[[Page 64447]]

adequacy of information sharing with the Commission by the market and its regulator. Based upon its review of the documents and representations submitted by the applicant, and subject to compliance with various conditions (e.g., representations governing access to books and records and the appointment of a U.S. agent for service of process), staff might conclude that granting no-action relief would not be contrary to the public interest.

\31\ The 1990 IOSCO Principles for the Oversight of Screen-Based Trading Systems (Screen-Based Principles) were developed by IOSCO Working Party 7 on futures, which was chaired by the CFTC. The IOSCO Screen-Based Principles set out in broad terms the international consensus as to the regulatory considerations to be addressed in reviewing mechanisms for screen-based trading. The Commission adopted the IOSCO Screen-Based Principles as a statement of Commission policy. See 55 FR 48670 (November 21, 1990). In adopting the IOSCO Screen-Based Principles, the Commission made clear that they establish general policy goals that will guide the Commission in resolving issues arising from screen-based trading systems, but would not mandate a particular substantive response.

\32\ The Commission previously summarized the scope of the staff's foreign board of trade (FBOT) inquiry as follows:

"Currently, Commission staff generally examines the following when reviewing an FBOT's request for terminal placement no-action relief: General information about the FBOT, as well as detailed information about: (i) membership criteria (including financial requirements); (ii) various aspects of the automated trading system (including the order-matching system, the audit trail, response time, reliability, security, and, of particular importance, adherence to the IOSCO principles for screen-based trading); (iii) settlement and clearing (including financial requirements and default procedures); (iv) the regulatory regime governing the FBOT in its home jurisdiction; (v) the FBOT's status in its home jurisdiction and its rules and enforcement thereof (including market surveillance and trade practice surveillance); and (vi) extant information-sharing agreements among the Commission, the FBOT, and the FBOT's regulatory authority. When issued, the terminal placement no-action letters conclude with a standard set of terms and conditions for the granting of the relief which include, among other things, a quarterly volume reporting requirement."

See 71 FR 34070, 34071 (June 13, 2006).

Essentially, as it has evolved, the staff review seeks to determine that the applicant foreign board of trade is subject to governmental authorization, appropriate rules prohibiting abusive trading practices, and continuing oversight by a regulator that has powers to intervene in the market and share information with the Commission. This review generally reflects the internationally accepted approaches used by many developed market jurisdictions to govern access to foreign electronic exchanges. These approaches generally are based upon a review of, and ongoing reliance upon, the foreign market's "home" regulatory regime, and are designed to maintain regulatory protections while avoiding the imposition of duplicative regulation.\33\

\33\ See, e.g., United Kingdom Financial Services Authority, Financial Services Handbook, Recognised Overseas Investment Exchanges (ROIE) and Recognised Overseas Clearing Houses (ROCH), Section 6. (In comparison with full authorisation as a domestic exchange, ROIE status "reduces the involvement which UK authorities need to have in the day-to-day affairs of an overseas recognised body because they are able to rely substantially on the supervisory and regulatory arrangements in the country where the applicant's head office is situated." See FSA Handbook, REC 6.1.2 http://fsahandbook.info/FSA/html/handbook/REC/6/1.
); Australian Securities and Investments Commission (ASIC) Policy Statement 177.8 describing alternative licensing for overseas markets ("the alternative licensing route in s795B(2) for overseas markets is intended to facilitate competition and avoid regulatory duplication while maintaining investor protection and market integrity."); Ontario Securities Commission Staff Notice 21-702: Regulatory Approach for Foreign-Based Stock Exchanges (exemption from recognition under section 147 of the Securities Act (Ontario); Autorite des marches financiers (Quebec): Policy Statement Respecting the Authorization of Foreign-Based Exchanges; the German Bundesanstalt f[uuml]r Finanzdienstleistungsaufsicht (BAFIN) authorizes the placement of terminals in Germany under Sections 37i et seq. of the German Securities Trading Act.

The Commission finds that the staff review appropriately addresses the Commission's concern that relief will only be granted with respect to bona fide foreign boards of trade.\34\ The Commission also finds that the staff's review of foreign board of trade representations and the related information submitted with respect to system integrity, clearing procedures and default protections is appropriately focused and respects the prohibitions of section 4(b). Finally, the various terms and conditions that have been imposed in the no-action letters have been reasonably and appropriately tailored to the factual circumstances raised by the applications for no-action relief.

\34\ See Section I supra.

Accordingly, the Commission endorses the general scope of review that was established in the DTB no-action letter, and as it has evolved in subsequent staff letters. The Commission also reconfirms its prior endorsement of the use of the IOSCO Screen-Based Trading Principles as a general template to guide its inquiry into the foreign board of trade's electronic trading system. The Commission notes that in 2000 IOSCO reaffirmed the continuing appropriateness of the Screen-Based Trading Principles, concluding that they retained their relevancy despite the evolution and increasing sophistication of electronic systems ten years after their adoption, and that they constitute an internationally accepted framework for the oversight of screen-based derivatives trading systems.\35\

\35\ Principles for the Oversight of Screen-Based Trading

Systems for Derivative Products--Review and Addition, IOSCO Technical Committee (2000) at p. 5, section III, Part 1. http://www.iosco.org/library/index.cfm?section=pubdocs&year=2000. In this "Review and Addition," IOSCO adopted four additional principles that encouraged regulatory authorities to develop cooperative arrangements to address risks that arise from cross-border derivatives markets, to share relevant information in an efficient and timely manner, to maintain a transparent framework for regulatory cooperation, and to take into account a jurisdiction's application of the IOSCO Objectives and Principles of Securities Regulation.

In this connection, staff's discretionary, selective reference to broad regulatory objectives, such as those contained in the CEA's Core Principles and in internationally-accepted standards,\36\ deemed by staff in its discretion to be reflective of a bona fide regulatory regime,\37\ is an appropriate, non-prescriptive means to structure its review for the purposes of determining the bona fide status of a foreign board of trade. This observation is not intended to suggest that the review should require substituted compliance with CEA market designation or registration requirements, apply any prescriptive approach,\38\ or otherwise be expanded into a quasi-designation process.\39\

\36\ See, e.g., Objectives and Principles of Securities Regulation, International Organization of Securities Commissions (IOSCO); and the Tokyo Communiqu[eacute] on Supervision of Commodity Futures Markets (1997), Annex B: Guidance on Components of Market Surveillance and Information Sharing. Annex B of the Tokyo Communiqu[eacute] establishes a non-prescriptive framework for undertaking market surveillance, the types of information to which market authorities should have access and collect, the appropriate analysis of information, the type of powers and capacity to investigate market abuse, the appropriate powers to intervene in the market to address abusive practices or disorderly conditions, the need for powers to impose disciplinary sanctions against members of the market as well as non-members, and the components of effective information sharing.

\37\ See, e.g., CEA Core Principle 4, section 5(b) of the CEA, for designated contract markets, which requires the monitoring of trading to prevent manipulation, price distortion, and disruption of the delivery or cash settlement process. Principle 28 of the IOSCO Objectives and Principles of Securities Regulation states that "regulation should be designed to detect and deter manipulation and other unfair trading practices."

\38\ In adopting the 1990 IOSCO Screen-Based Principles, the Commission made clear that "they establish general policy goals that will guide the Commission in resolving issues arising from screen-based trading systems, but do not mandate a particular substantive response." 55 FR 48671, 48672 (November 21, 1990).

\39\ See generally, footnote 30.

C. The Commission Intends To Preserve the Flexibility and Adaptability of the No-Action Process

The Commission's endorsement of the no-action process's overall approach and scope of review is not intended to limit the staff's ability to adapt or modify its review as it deems necessary to determine the bona fide status of a foreign board of trade, or to address any particular U.S. customer protection or market integrity concerns, as identified in Section 3(b) of the CEA, that might be raised by a request for no-action relief. The Commission understands that staff potentially may need to adapt its analysis, as well as the scope and depth of its inquiry, to address changing factual circumstances and any specific regulatory concerns.\40\

\40\ See, e.g., CL 25 (Chicago Board of Trade) at 1: "We do believe that the analysis preceding the issuance of no-action letters must constantly be re-evaluated and updated to reflect changes and developments in today's dynamic marketplace."

[[Page 64448]]

Similarly, there should be broad discretion under the no-action process to determine, based on the totality of factors, that the foreign exchange and the applicable regulatory regime meet relevant regulatory objectives, notwithstanding that a particular aspect of the foreign jurisdiction's approach is not identical to that of the Commission's regulatory program.\41\ In this regard, the Commission recognizes that in an international context, common regulatory objectives can be attained through different regulatory means.\42\ The mere fact that a foreign jurisdiction has determined to achieve a regulatory objective in a manner that is different than the Commission's approach often is the result of varied business histories, experiences and legislative choices. The determinative factor in the review should be an affirmative conclusion that the regulatory structure in question addresses the particular regulatory objective deemed to be most relevant.\43\

\41\ Compare Appendix A, Part 30 Interpretative Statement with Respect to the Commission's Exemptive Authority under Sec. 30.10 of Its Rules, 17 CFR Part 30, Appendix A: "In this connection, the Commission would have broad discretion to determine that the policies of any program element generally are met, notwithstanding the fact that the offshore program does not contain an element identical to that of the Commission's regulatory program and conversely may assess how particular elements are in fact applied by offshore authorities."

\42\ See IOSCO Principles and Objectives of Securities Regulation at 3: "There is often no single correct approach to a regulatory issue. Legislation and regulatory structures vary between jurisdictions and reflect local market conditions and historical development."

\43\ This can be confirmed through the applicant's submission of representations and relevant statutes, rules and statements of policy, regulatory and self-regulatory oversight reports, confirmations of good standing by the oversight regulator, and informal staff discussions with relevant officials of the exchange and its oversight regulator. The Commission understands the term "regulatory structure" broadly to include the regulations and policies of the exchange, its regulator or another self-regulatory organization, as well as relevant laws and regulations.

III. Whether Objective Threshold Standards Should Be Developed That Would Indicate That a Board of Trade Is No Longer Located Outside the United States for Purposes of Section 4(A) of the CEA Such That the Commission Should Require DCM Designation or DTEF Registration

In its release issued in advance of the June 2006 public hearing, the Commission requested comment on, among other things, what level of presence by a foreign board of trade would be a reasonable threshold for determining whether to require DCM/DTEF registration and in particular whether volume should be a determinative factor.\44\ The Commission also requested comment on whether it would be appropriate for the Commission to exercise jurisdiction over foreign boards of trade that permit direct access when they list contracts with underlying products that are integral to the U.S. economy.\45\

\44\ 71 FR 34073 (June 13, 2006).
\45\ Id.

A. The Commission Is Not Developing Objective Standards Establishing a Threshold Test of U.S. Location

As noted above in the summary of comments and hearing discussions, most commenters rejected any wholesale, mechanistic adoption of threshold indicators of U.S. location. A theme voiced by many commenters was that the Commission should not attempt to formalize any objective "bright line" test of U.S. location, particularly during a period of rapid changes in the technology of direct access and market communication, as well as in global business structures and relationships.\46\ Among the reasons noted by U.S. industry commenters in particular for not adopting objective standards establishing a threshold test of U.S. location at this time were: the difficulty of developing threshold criteria that would not be viewed as arbitrary,\47\ the difficulty of determining primary location in a period of rapid structural change in the futures industry,\48\ the possible inhibition of structural and technological innovation,\49\ and the danger that an overly-inclusive criterion could result in duplicative regulation \50\ as well as a protectionist response in other jurisdictions that might inhibit the ability of the U.S. futures industry to compete effectively on a global basis.\51\

\46\ See, e.g., CL 3 (comments of Ben Steil, Director of International Economics, Council on Foreign Relations) at 2.

\47\ See CL 2 (New York Board of Trade) at 2; and CL 28 (Futures Industry Association) at 11.

\48\ See CL 25 (Chicago Board of Trade) at 9: "* * * with cross-border joint ventures and mergers between boards of trade both existing and proposed, it is likely to become more and more difficult to determine the primary location of an exchange."

\49\ See CL 2 (New York Board of Trade) at 2: "Similarly, we do not believe that defining "location" on the basis of management, ownership arrangements or the location of offices and technology of an exchange is instructive, as they are likely to change over time and certain functions, such as clearing and technology services, lend themselves to outsourcing." See also CL 9 (Chicago Mercantile Exchange) at 7: "For example, a U.S. exchange serving EU customers is likely to maintain an EU sales office and sales representatives, an EU technical office or outsourced technical services to install and service networks, routers and terminals, banking connections, delivery facilities and data centers and/or communication hubs. In the near future, if distributed computing makes trade matching more effective, some part of the matching operations may occur in the EU. It is not difficult to imagine the adverse consequences if each of the jurisdictions in which these operations take place were to assert its right to regulate."

\50\ See CL 9 (Chicago Mercantile Exchange, Inc.) at 7.

\51\ See CL 2 (New York Board of Trade) at 2: "such an approach runs the risk of creating barriers to U.S. exchanges as they attempt to expand business abroad;" CL 7 (Minneapolis Grain Exchange) at 2; CL 25 (Chicago Board of Trade) at 7; CL 9 (Chicago Mercantile Exchange, Inc.) at 6; CL 28 (Futures Industry Association) at 11; CL 43 (New York Mercantile Exchange) at 8; and NC 4 (Chicago Mercantile Exchange Holdings Inc) at 2.

For the reasons noted above, the Commission has decided not to adopt any objective standards establishing a threshold test of U.S. location. Commission staff will continue to assess the legitimacy of any particular applicant to seek relief as a "foreign" board of trade by considering the totality of factors presented by an applicant. This flexible, case-by-case approach will permit staff, during a period of evolving market structure, to consider the unique combination of factual indicators of U.S. presence that may be presented by an applicant for relief.\52\

\52\ See CL 43 (New York Mercantile Exchange) at 6. "Accordingly, while the Commission may want to reserve for the future the possibility to revisit this area, we believe by far the best approach at this point in time would be to provide guidance to Commission staff in the continuation of the ongoing staff no-action letter process."

B. Volume Is Not a Determinative Indicator of U.S. Location

The relevancy of U.S-originating volume as a means to determine whether a foreign-organized electronic exchange is "located" in the United States for purposes of CEA section 4(a) has been a long-standing, unresolved issue since the issuance of the DTB no-action letter.\53\

Key policy issue for memo

\53\ The Commission had noted in its 1998 Concept Release that " by conditioning its letter on the DTB providing the Division [staff] with quarterly updates of DTB's U.S.-originating trading volume, the Division intended to leave open the possibility that at some point DTB's activities in the U.S. might rise to a level that would necessitate greater Commission regulation." See 63 FR 39779, 39781 (July 24, 1998).

Notwithstanding the intuitive appeal of using volume as a proxy for U.S. presence, neither the Commission nor the futures industry in its extended consideration of this issue during the Commission's 1998-1999 rulemaking on access to automated boards of trade could reach consensus on the specific manner in which volume could be usefully applied to determine when a foreign board of trade's U.S. presence required contract market designation.\54\

\54\ See 64 FR at 14170.

Comments submitted in response to the Commission's recent Request for Comment, as well as statements made at the related public hearing, reiterated the

[[Page 64449]]

various problems associated with the use of volume, such as the regulatory uncertainty that would result from using a constantly fluctuating variable such as volume, the arbitrary nature of any fixed percentage, the difficulties in accurately measuring U.S.-based volume, and the possible inhibiting effect on exchanges' global activities.\55\ Significantly, all of the U.S. futures exchanges agreed, as did foreign exchanges, that volume was not a stable indicator of U.S. presence for the purpose of requiring DCM designation or DTEF registration.\56\

\55\ As noted at the Commission's Hearing, it is inevitable that as exchanges consolidate, they will list contracts that are of great economic interest in other jurisdictions and attract enormous participation from other jurisdictions. See Hearing Tr. at 100 (Ben Steil). If significant volume denoted grounds for exchange licensing, then such an exchange potentially would be subject to duplicative and burdensome regulation.

\56\ See CL 2 (New York Board of Trade) at 2; CL 7 (Minneapolis Grain Exchange) at 1; CL 9 (Chicago Mercantile Exchange) at 6; CL 25 (Chicago Board of Trade) at 9-10; CL 43 (New York Mercantile Exchange) at 7. See also CL 21 (Tokyo Financial exchange) at 1; CL 22 (Federation of European Securities Exchanges) at 3; and CL 23 (Eurex Deutschland) at 7-8 for representative foreign exchange comment. Letter available at: http://www.cftc.gov/dea/deaforeignterminaltable.htm.

Accordingly, the Commission agrees that volume is not determinative of U.S. location. This conclusion does not mean, however, that volume statistics should no longer be required from boards of trade operating under a staff no-action letter, as the submission of volume data may serve other regulatory interests. The Commission expects that any data collection requirement would be tailored carefully to provide meaningful information.

C. Nature of the Underlying Contract Is Not Determinative of Designation

Some commenters have suggested that the Commission should require foreign boards of trade that list contracts based on a U.S.-produced or economically important commodity to obtain contract market designation rather than be permitted to operate under a staff no-action letter.\57\ In effect, such proposals would make the application of the parenthetical exclusion from designation in CEA section 4(a) for boards of trade located outside the U.S. dependent upon the nature of the commodity underlying a particular futures contract.

\57\ See CL 25 (Chicago Board of Trade) at 10-11: The statement of Policy should exclude U.S. Government Securities. See also letter dated January 27, 2006 from the NYMEX to Reuben Jeffery III: "The core regulatory policy question is, of course, whether the WTI crude oil futures contract is a foreign contract or whether it is a U.S. futures contract requiring ICE Futures to become a U.S. designated contract market. * * * NYMEX believes that the new WTI futures contract is a U.S. product * * * drilled and produced in the US."

However, the nature of the underlying commodity is not probative of the "location" of a board of trade for purposes of CEA section 4(a). Such an approach would lead to the anomalous result of a board of trade being characterized as "foreign" for some contracts, but considered a "U.S.-based" exchange for a single contract and therefore required to seek contract market designation. In addition, several U.S. contract markets list futures contracts on commodities that are produced or delivered in foreign jurisdictions. Were the Commission to endorse using such criteria to require designation, such a policy could be cited by foreign jurisdictions as a rationale to subject U.S. markets to regulation.\58\

This is the situation with ICE Futures + WTI

Is this so necessary?

\58\ See generally CL 2 (New York Board of Trade).

IV. Enhancements to the No-Action Process

Notwithstanding its endorsement of the no-action process, the

Commission has identified additional enhancements that are intended to ensure the availability of necessary information, and to ensure that staff will carefully consider proposals for trading contracts that potentially could have an adverse effect on the ability of the Commission to carry out its regulatory responsibilities.

A. The Trading of Contracts That May Adversely Affect the Commission's Regulatory Responsibilities Should Be Addressed

Should staff become aware that the trading of products listed on a foreign board of trade that has been granted no-action relief:

- Affects adversely the pricing of contracts traded on any registered entity as defined in Section 1a(29) of the CEA, or of contracts traded on any cash market for commodities subject to the CEA;
- Creates unacceptable systemic risks or disruptions in those markets or the U.S. financial system, including capital markets; or
- Facilitates abusive trading practices on U.S. markets or otherwise interferes with the ability of the Commission to carry out its regulatory responsibilities, in particular market surveillance,

staff may exercise its discretion and consider a full range of responses, such as imposing conditions and requiring enhanced information sharing arrangements and surveillance procedures (see below), or other appropriate action. In this regard, the Commission retains plenary authority to address manipulative or abusive trading practices that affect U.S. futures and cash markets and market users,\59\ and will use that authority when necessary and appropriate.

\59\ See, e.g., CEA Section 9(a)(2), 7 U.S.C. 13(a)(2) and CEA section 8a(5), 7 U.S.C. 12a(5).

B. Enhanced Information Sharing Procedures Should Be Adopted

In a global market environment, where conduct that takes place on markets located outside the United States may have an impact on U.S. futures and cash markets, as well as the members and users of those markets, the Commission needs to cooperate closely with foreign market authorities in order to ensure that the Commission can carry out its regulatory responsibilities. The Commission therefore endorses the existing practice of requiring information sharing assurances as a condition to issuance of a no-action letter and continued activities pursuant to the granted relief. However, in light of the Commission's experiences in this area, as well as the development of internationally accepted information sharing arrangements and standards, the following enhancements are appropriate.

1. Exchange and Its Regulator Should Have Power, Authority and Willingness To Share Needed Information

In negotiating information sharing arrangements, staff should confirm that the market and its regulator have the power to obtain the specific types of information that may be needed by the Commission, as well as the authority to share that information with the Commission on an "as needed" basis. Moreover, staff should obtain evidence of the market's and regulator's willingness to share information (e.g., through explicit undertakings). In this regard, staff should note whether the applicant's regulator has signed the IOSCO Multilateral Memorandum of Understanding (MMOU), which requires as a condition to executing the MMOU a demonstration of power, authority and willingness to share information. If the applicant's regulator is not a signatory of the IOSCO MMOU, staff should ascertain whether any prohibitions to information sharing exist.

2. Applicants for No-Action Relief Should Sign the Exchange International MOU

When exchange member firms and market participants trade on multiple global exchanges, no one regulator or market authority will have all of the information necessary to evaluate the risks to its markets. The Exchange International Information Sharing Memorandum of Understanding and Agreement (Exchange International MOU) \60\ and the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations (Declaration),\61\ a companion arrangement for regulators, were developed in 1996 as an international response to address such gaps in information. These arrangements facilitate the identification of large exposures by firms that could have a potentially adverse effect on multiple markets.

\60\ The development of the Exchange International MOU was one of the achievements that resulted from the FIA sponsored Global Task Force on Financial Integrity, which was convened to address the cross-border issues that were identified in connection with the failure of Barings Plc. To date, fifty-six global derivatives exchanges have signed the MOU.

\61\ The Declaration was developed through discussions at the CFTC's international regulators conference, and was motivated by work recommendations issued from the Windsor Conference and Tokyo Conference, which were convened by the CFTC, the U.K. FSA and Japanese regulators (Ministry of International Trade and Industry (MITI) and the Ministry of Agriculture, Forestry and Fisheries (MAFF)) to respond to the cross-border issues raised by the failure of Barings Plc. The Declaration was developed to address instances in which an exchange would not be able to share information directly with another exchange under the Exchange International MOU. Twenty-eight regulators have signed the Declaration. Copy available at: http://www.cftc.gov/oia/oiabocadec0398.htm.

Applicants for staff no-action relief should execute, or commit to execute, the Exchange International MOU because it demonstrates a commitment to share information between exchanges that is needed to ensure the integrity of markets and to address systemic risks. In circumstances where a foreign board of trade is unable to share information directly with another exchange, its regulator should sign the Declaration (or commit to share such information pursuant to an existing MOU or other arrangement with the Commission).

3. Arrangements To Obtain and Share Information Required To Carry Out the Commission's Domestic Market Surveillance Responsibilities Should Be a Condition to No-Action Relief

When an applicant for, or recipient of, no-action relief trades or will trade contracts that staff in its discretion determines may affect the Commission's ability to carry out its surveillance responsibilities (e.g., an economically linked contract), the foreign board of trade should be required to provide directly to the Commission and in a timely manner, appropriate trade and position data as deemed necessary by Commission staff. Alternative arrangements may be acceptable where local law or regulatory policies require the interposition of the market regulator, provided that such arrangements supply the Commission on a timely basis with the market information that the Commission's staff determines is necessary to carry out the Commission's market surveillance responsibilities.

C. The Continuing Good Standing of the Foreign Board of Trade Should Be Verified

Although the no-action letters require that the foreign board of trade submit to staff and keep updated on a quarterly basis certain material information, staff should develop a non-burdensome and efficient means to confirm the board of trade's continued "good standing" in its authorizing jurisdiction. This could take the form of an annual or biannual confirmation by the relevant oversight regulator of the foreign board of trade's authorized status and the continuing validity of any relevant representations that had been made by the foreign board of trade in its initial application.

V. The No-Action Process Is Not the Appropriate Means To Address Competitive Issues

In their comments, U.S. futures exchanges essentially encouraged the Commission to review its regulations to consider the competitive impact of differences between its regulations and those of other jurisdictions.\62\ Some exchanges suggested that the Commission should address perceived regulatory disparities in connection with the no-action process,\63\ particularly where the exchanges trade similar products.\64\

\62\ See, e.g., (Chicago Mercantile Holdings, Inc.) Request to Appear at the Public Hearing at 2; CL 7 (Minneapolis Grain Exchange) at 1; CL 43 (New York Mercantile Exchange) at 2, 10-12.

\63\ See CL 25 (Chicago Board of Trade) at 1.

\64\ See Hearing Tr. (NYMEX Chairman James Newsome) at 72, 82.

The Commission does not believe that it should address competitive concerns within the context of any individual request for a staff no-action letter. Claims of competitive advantage or disadvantage are exceedingly difficult to prove. An exchange's competitive status reflects an array of contributing factors, such as its overall rule structure, its governance and business policy determinations, its fee structure, type of contracts offered, the method of trading, the efficiency of its technology and clearing systems, as well as external factors such as statutory restrictions, tax structure and the overall legal system.\65\ Rather, the appropriate focus of the no-action review should be on addressing the bona fide status of, and domestic regulatory concerns raised by, an applicant for a no-action letter.

\65\ In a 1999 report, the Commission's Division of Economic Analysis attributed changes in market activity since the 1980s to the continued market maturation process, nonregulatory cost considerations and technological change rather than international regulatory differences.

"In sum, neither trends in the locus of trading activity nor regulatory developments over the last five years suggest an erosion of U.S. futures markets' global competitive position. However, to the extent that the movements toward electronic trading systems and exchange consolidation that were observed over the period of this study continue into the future, the competitive structure of global futures markets is likely to change significantly. The Commission is committed to continued regulatory flexibility in the face of these trends. However, it is likely that the potential cost savings generated by these trends, and not the nature of the differences among the regulatory systems of various nations, will be most important in shaping the composition and trading interest of the global futures industry in the twenty first century."

The Global Competitiveness of U.S. Futures Markets Revisited, the Commission's Division of Economic Analysis (November 1999), http://www.cftc.gov/dea/compete/deaglobal_competitiveness.htm.

The CFMA has materially improved the competitive status of the U.S. futures industry.\66\ Nonetheless, the Commission takes seriously the CFMA findings, among others, that "financial services regulatory policy must be flexible to account for rapidly changing derivatives industry business practices," and "regulatory impediments to the operation of global business interests can compromise the competitiveness of United States businesses." \67\ The Commission will continue to address these policy goals through ongoing review of its regulatory program.

\66\ See, e.g. CL 9 (Chicago Mercantile Exchange): "CFMA greatly improved the competitive environment in the U.S. and eliminated many of the legitimate concerns of U.S. based futures exchanges."

\67\ CFMA Sections 126(a)(3), 126(a)(4).

Conclusion

The U.S. futures industry is undergoing a period of dynamic change, marked by technological innovation, consolidation, evolving business relationships, and increasing global competition. The Commission does not presume to be able to predict the course of ongoing industry evolution in these areas.

The Commission's appropriate role during such a period of rapid change is to construct policies that will foster achievement of the Act's section 3 objectives of ensuring market and financial integrity, addressing systemic risks, and protecting market participants, but to do so in a flexible manner that avoids inadvertently inhibiting technological innovation or the ability of the U.S. futures industry

[[Page 64451]]

to compete effectively in a global environment.

This Statement of Policy has been developed as a means for the Commission to respond flexibly to the challenges posed by the ongoing evolution in electronic access to global markets. The Commission will continue to monitor carefully, and review the Policy Statement as necessary in light of, the ongoing evolution of cross-border electronic direct access and intermediation in order to ensure that it does not adversely affect U.S. cash and futures markets, market participants and customers, as well as the consumers affected by those foreign market transactions.

Issued in Washington, DC, on October 27, 2006 by the Commission.
Eileen A. Donovan,
Acting Secretary of the Commission.
[FR Doc. E6-18513 Filed 11-1-06; 8:45 am]

BILLING CODE 6351-01-P

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Division of
Market Oversight

CFTC letter No. 07-06
May 24, 2007
No-Action
Division of Market Oversight

Michael M. Philipp, Esq.
Winston & Strawn LLP
35 W. Wacker Drive
Chicago, IL 60601-9703

Re: Request for No-Action Relief from Sections 5 and 5a of the Commodity Exchange Act, as amended, and the Regulations promulgated thereunder relating to contract markets and derivatives transaction execution facilities

Dear Mr. Philipp:

This is in response to your letter dated March 13, 2007 to the Division of Market Oversight (Division) of the Commodity Futures Trading Commission (CFTC or Commission).[1] By this correspondence, you request, on behalf of the Dubai Mercantile Exchange Limited (DME or Exchange), a company established in the Dubai International Financial Centre (DIFC)[2] located in the UAE, that the Division issue a no-action letter confirming that it will not recommend enforcement action to the Commission against DME or its members[3] or guaranteed customers[4] if DME does not seek designation as a contract market (DCM) or registration as a derivatives transaction execution facility (DTEF) pursuant to Sections 5 and 5a, respectively, of the Commodity Exchange Act (CEA or Act) or comply with any other section of the Act or Commission regulations relating specifically to DCMs or DTEFs in connection with the installation and direct access[5] use of the DME's electronic trading and order matching system known as DME Direct[6] in the United States[7] by members, seat lessees[8] and guaranteed customers. (No-action request).

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[1] Letter from Michael M. Philipp, Esq., Winston & Strawn LLP, to Richard Shilts, Director, Division of Market Oversight, Commodity Futures Trading Commission (March 13, 2007).

[2] The DIFC is a Financial Free Zone, established in accordance with United Arab Emirates (UAE) Federal Law and by Dubai Law.

[3] For the purposes of this letter and the relief provided herein, the term "member" shall include floor members, off-floor members and clearing members of the DME. Furthermore, references herein to members shall include the affiliates of such members, to the extent that such affiliates are granted direct access by members to DME Direct. An "affiliate" of a member means any person, as the term is defined in Section 1a(28) of the Act, that: (i) owns 50% or more of a member (ii) is owned 50% or more by the member; or (iii) is owned 50% or more by a third person that also owns 50% or more of a member. DME represents that to the extent a member permits an affiliate to have direct access to DME Direct, such affiliate will be required to comply with all of DME's Rules relating to trading on DME Direct and the DME member shall ultimately be responsible to DME for ensuring such compliance.

[4] For the purposes of this letter and the relief provided herein, the term "guaranteed customer" means a non-member of the DME who is permitted by a clearing member to have direct access to DME Direct in accordance with DME Rules and whose transactions on DME are financially guaranteed by the DME clearing member. You represent that guaranteed customers are subject to all relevant DME Rules and must agree, in writing, to be bound by DME Rules. Further, because retail customers are not permitted to trade on DME, no guaranteed customer may be a retail customer.

Specifically, DME wishes to make DME Direct available to:

(1) DME members and guaranteed customers in the U.S. who wish to trade for their own accounts through direct access to DME Direct;

(2) DME members and guaranteed customers who are registered with the Commission as futures commission merchants (FCMs) or who are exempt from such registration pursuant to Commission Regulation 30.10 (Rule 30.10 Firms)[9] and who wish to submit orders from or on behalf of U.S. customers[10] for transmission through direct access to DME Direct;

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[5] For the purpose of this letter and the relief granted herein, the term "direct access" refers to the explicit grant of authority by the DME to a member or a guaranteed customer to enter orders directly into DME Direct.

[6] DME Direct is the brand name of the electronic trading system employed by DME for accessing DME products traded through the NYMEX ClearPort® Trading Services (CPT).

[7] For purposes of this letter and the relief provided herein, the term "United States" shall include the U.S., its territories and possessions.

[8] As defined in the DME Rulebook, a "seat lessee" is a person to whom a floor member has leased a seat. According to DME Rules, a seat lessee may trade either on the account of the floor member or on its own account held with a clearing member, but not on both, and may not accept or enter orders for a customer account.

[9] Rule 30.10 permits a person affected by the requirements contained in Part 30 of the Commission's rules to petition the Commission for an exemption from such requirements. Appendix A to the Part 30 rules provides an interpretative statement that clarifies that a foreign regulator or self-regulatory organization (SRO) can petition the Commission under Rule 30.10 for an order to permit firms that are members of the SRO and subject to regulation by the foreign regulator to conduct business from locations outside of the United States for United States persons on non-United States boards of trade without registering under the Act, based upon the person's substituted compliance with a foreign regulatory structure found comparable to that administered by the Commission under the Act.

Among the issues considered by the Commission in determining whether to grant Rule 30.10 relief to a foreign regulatory or self-regulatory authority are the authority's: (1) requirements relating to the registration, authorization, or other form of licensing, fitness review, or qualification of persons through whom customer orders are solicited and accepted; (2) minimum financial requirements for those persons that accept customer funds; (3) minimum sales practice standards, including risk disclosures, and the risk of transactions undertaken outside of the United States; (4) procedures for auditing compliance with the requirements of the regulatory program, including recordkeeping and reporting requirements; (5) standards for the protection of customer funds from misapplication; and (6) arrangements for the sharing of information with the United States. Interpretative Statement with Respect to the Commission's Exemptive Authority Under § 30.10 of its Rules, 17 C.F.R. Part 30, Appendix A (2006).

[10] For purposes of this letter and the relief provided herein, the term "United States customers" shall have the same meaning as the term "foreign futures or foreign options customers" as it is defined in Rule 30.1 (c). Because no retail customer (defined as any person who does not meet the definition of "client" and discussed below) will be permitted to trade directly or indirectly on DME, no U.S. customer may be a retail customer. DME Rules prohibit

(3) DME members and guaranteed customers who are registered with the Commission as Commodity Pool Operators (CPO) or Commodity Trading Advisors (CTA), or who are exempt from such CPO or CTA registration pursuant to Commission Regulation 4.13 or 4.14, and who wish to submit orders on behalf of U.S. pools they operate or U.S. customer accounts for which they have discretionary authority, respectively, for transmission through direct access to DME Direct, provided that an FCM or a Rule 30.10 Firm acts as clearing firm with respect to all activity conducted by such CPOs and CTAs through the submission of orders on DME Direct; and/or

(4) DME members or guaranteed customers who are registered with the Commission as FCMs or who are Rule 30.10 Firms and who wish to accept orders for U.S. customers transmitted via automated order routing systems (AORS)[11] for submission to DME Direct.

As you know, the Commission, on October 27, 2006, issued a policy statement that affirmed the use of the no-action process to permit foreign boards of trade to provide direct access to their electronic trading systems from the U.S. (Policy Statement).[12] The Division has reviewed DME's No-action request and the materials submitted in support thereof in accordance with the Policy Statement and the June 2, 1999, Commission Order (June 2 Order) which first directed the Commission staff to consider requests from foreign exchanges for interim no-action relief to allow them to provide direct access to their trading systems from the U.S.[13]

In connection with its No-action request, DME has forwarded the following information to the Division:

- General information regarding DME (*e.g.*, its location and organization);
- DME Rules;
- DME Ethics Guidelines;
- Dubai Financial Services Authority (DFSA) Conduct of Business (COB) Rules;

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members from opening an account for, or entering into an Exchange contract with, a retail customer. This prohibition applies to clearing members when holding accounts for both guaranteed customers as well as all other customers who have access to DME through a member. The prohibition on retail customers independently applies to guaranteed customers under DME Rules.

[11] For the purposes of this letter, the term "AORS" shall mean any system of computers, software or other devices that allows entry of orders through another party who has been granted direct access to DME Direct, (a DME member or guaranteed customer) for transmission to DME Direct, where without substantial human intervention, trade matching or execution takes place.

[12] Boards of Trade Located Outside of the United States and No-Action Relief from the Requirement to Become a Designated Contract Market or Derivatives Transaction Execution Facility, 71 Fed. Reg. 64443 (November 2, 2006).

[13] Order of the CFTC Withdrawing Proposed Rules Regarding Access to Automated Boards of Trade, 64 Fed. Reg. 32829, 32830 (June 18, 1999).

- DFSA Authorization (AUT) Rules;
- DFSA General (GEN) Rules;
- DFSA Recognition (REC) Rules;
- DFSA Anti-Money Laundering (AML) Rules;
- Regulatory Law (DIFC Law No. 1 of 2004), as amended (RL 2004);
- Markets Law (DIFC Law No. 12 of 2004) (ML2004);
- Clearing Services Agreement, DME – NYMEX, dated September 1, 2005 (CSA);
- General Services Agreement, DME – NYMEX, dated September 1, 2005 (GSA);
- Software Licensing and Maintenance Agreement, DME – NYMEX, dated September 1, 2005 (SLMA);
- DFSA Recognized Jurisdiction Notice (table of recognized [Tier One] jurisdictions), dated April 18, 2006;
- Brochure, "Doing Business in the Dubai International Financial Centre" (DIFC);
- Certification of authorized representative of DME as to the truth and completeness of the material facts set forth in the request for no-action relief; and
- Undertaking of authorized representative of DME to notify Commission staff if, prior to the issuance of no-action relief requested in letter dated March 13, 2007, any material representation made in such request for no-action relief ceases to be true and complete.

Representations made by DME regarding the structure of DME, DME's activities in the U.S., DME's membership criteria, the electronic trading and order matching system known as DME Direct, the relevant regulatory regime in Dubai in the UAE, and the information-sharing arrangements applicable to DME and its regulator are summarized in Sections I - VI below. For purposes of its response to the No-action request, the Division has relied upon DME's representations and information provided by DME and has not conducted an independent review to confirm their accuracy.[14]

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[14] As stated below, the no-action relief provided herein is contingent upon the accuracy of the representations made by DME in support of its No-action request. Any materially different, changed, or omitted facts or circumstances may render the no-action relief void or cause the Division, in its discretion, to condition further, modify, suspend, terminate, or otherwise restrict the relief.

I. GENERAL INFORMATION REGARDING DME

DME is directly owned by DME Holdings Limited (DME Holdings), a joint venture between NYMEX Holdings, Inc. (NYMEX Holdings), and Tatweer, Inc. (Tatweer),[15] that is incorporated in Bermuda.[16] DME was incorporated in the DIFC, located in the UAE, on September 29, 2005 as a private limited company under the DIFC Companies Law (No. 2 of 2004), as amended. Since its establishment, DME has operated in the DIFC. DME represents that it does not maintain a representative office in the U.S., nor does it provide investment advice, solicit orders or direct trading from the U.S.

DME has been licensed by the DFSA[17] as an Authorized Market Institution (AMI) to operate an exchange within the DIFC pursuant to Article 45 of the RL 2004. Initially, DME has made the following contracts available for electronic trading on DME Direct: Oman Sour Crude futures contract, West Texas Intermediate (WTI) - Oman Financial Spread futures contract, and Brent - Oman Financial Spread futures contract.[18] The DME also plans to list later in 2007 a Middle East-based jet fuel futures contract.

Certain of the Exchange's operations are outsourced to its affiliate, the New York Mercantile Exchange, Inc. (NYMEX),[19] pursuant to a Software License and Maintenance Agreement (SLMA) and a General Services Agreement (GSA) executed between Tatweer, NYMEX Holdings and DME Holdings[20] covering technology hosting, market surveillance and other services. In addition, the clearing department of NYMEX (NYMEX Clearing), a CFTC-regulated DCO, provides clearance and settlement services to DME pursuant to a Clearing Services Agreement (CSA) executed between NYMEX and DME.

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[15] Tatweer was incorporated in Dubai in October 2004 as part of the Dubai Holding Group. Dubai Holding Group plays a role in developing and managing major projects aimed at promoting and developing Dubai and the region as an international venue for commerce, finance and tourism.

[16] On November 20, 2006, the Sultanate of Oman's Ministry of Finance (MOF) and the DME reached an agreement for MOF to acquire a [ ] percent equity stake in the DME. When the transaction is completed, the Oman Investment Fund will own approximately [ ] percent of DME Holdings while NYMEX Holdings and Tatweer will each own approximately [ ] percent.

[17] As discussed further below, the DFSA, created under DIFC Law No. 9 of 2004, is the regulator responsible for the authorization, licensing and registration of institutions and individuals who wish to conduct financial and ancillary services in or from the DIFC. The DFSA also supervises regulated participants and monitors their compliance with applicable laws, regulations and rules.

[18] The Oman Sour Crude futures contract is physically settled with one delivery point in Mina Al Fahal, Oman. The WTI - Oman Financial and the Brent - Oman Financial spread contracts are cash-settled contracts.

[19] NYMEX is wholly owned by its parent company, NYMEX Holdings. NYMEX has been designated by the Commission as a DCM and registered as a Derivatives Clearing Organization (DCO).

[20] The outsourcing arrangements also provide for NYMEX to assist DME in its trading floor operations, including technology and compliance assistance, on an on-going basis.

DME is overseen by a Board of Directors (Board) which is comprised of eight directors including four independent directors[21] and an equal number of representatives of NYMEX Holdings and Tatweer. The Board has overall responsibility for ensuring that DME complies with its obligations under the DFSA regulatory framework, including its obligations as a DFSA authorized body, and for approving strategic decisions. The Board has the power to appoint the members of several committees to assist in the governance of DME, including the disciplinary, appeal, compliance review, product advisory, governance and membership committees.[22] The day-to-day management of the Exchange is the responsibility of the DME Chief Executive Officer (CEO) and the executive management team. The CEO is, in particular, responsible for helping to develop Exchange strategy and business plans and for implementing the Board's strategy. He is assisted by a full-time staff, including a compliance department.[23] In the event of an emergency, each DME Board member and the DME CEO and CCO have the right, under DME Rules, to order a suspension of trading for such period as in their judgment is necessary.[24]

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[21] The 50 percent independent directors requirement is an ongoing requisite of the AMI license. Under DFSA AMI Guidance, the DFSA will consider a director to be "independent" if the director is found, on the reasonable determination by the Governing Body (*i.e.*, Board), to: (1) be independent in character and judgment; and (2) have no relationships or circumstances which are likely to affect or could appear to affect the director's judgment in a manner other than in the best interests of the AMI. The Guidance also identifies a number of factors that the Governing Body should consider in determining the independence of a director.

[22] The Board's Corporate Governance Committee (Governance Committee) is charged with reviewing and assessing the DME's corporate structure and standards for integrity and professionalism. The Governance Committee is also charged with reviewing the DME's risk management process and to keep the Board apprised of such issues. DME has adopted Ethics Guidelines setting out fundamental ethical principles for all DME Members, directors, committee members, and employees with respect to DME business, including principles relating to conflicts of interest.

[23] DME has a staff of approximately 80 people. The Compliance Department is staffed with seven people, including the Chief Compliance Officer (CCO) and an administrative assistant. Reporting directly to the CCO are the Director of Membership Surveillance, the Manager of Market Surveillance, and the Senior Manager of Risk. Reporting to the Director of Membership Surveillance are a Membership Surveillance Analyst and a Trainee-Membership Surveillance Analyst. As explained in more detail below, the Membership Surveillance function is responsible for the monitoring of business systems and controls at member firms, guaranteed customers, seat lessees, and applicants for membership. Reporting to the Manager of Market Surveillance will be a Market Surveillance Analyst, a NYMEX market surveillance analyst who will be seconded to the DME. The Market Surveillance function is responsible for monitoring, oversight and investigation of daily market activities and market irregularities. Finally, the Senior Manager of Risk is responsible for review and analysis of the financial regulation within the jurisdictions where the DME has trading terminals, a physical presence or a license. The Senior Manager of Risk is also responsible for management of the overseas regulator database, operational risk, resolution of audit points and resolution of customer complaints.

[24] Under DME Rules, an emergency includes, but is not limited to, the following circumstances: (1) where any manipulative activity or attempted manipulative activity is suspected; (2) any actual, attempted or threatened corner, squeeze, congestion or undue concentration of positions; (3) any circumstance or circumstances that may materially affect the performance of futures or options contracts traded on the Exchange; (4) any action taken by or against the UAE government, the Government of the Emirate of Dubai, the DIFC Authority, any foreign government, any local government, authority or agency, or by any other exchange, or trade association, whether foreign or domestic, which action may have a direct impact on trading on the Exchange; (5) any circumstances that may have a severe, adverse effect on the physical functions of the Exchange, including a physical emergency; (6) any other unusual, and unforeseeable adverse circumstance.

II. MEMBERSHIP AND GUARANTEED CUSTOMERS

A. Members

Any individual, corporate body, partnership or unincorporated association may apply for membership of DME as long as the applicant meets the specific requirements set out in the DME Rules. DME has the following categories of membership: floor members, off-floor members, and clearing members. DME Rules require members to comply with all applicable rules and regulations, including DFSA requirements.

Floor members have the right to access and to trade on DME Direct on the Exchange trading floor (Exchange Floor).[25] Initially, DME will issue 50 seats, which confer on the floor members an equity interest in the Exchange, as well as lower Exchange fees and the right to occupy a seat on the Exchange Floor. A floor member's trading privileges are exercised on the Exchange Floor by individuals who are employees or representatives of that floor member. An applicant for floor membership must, among other things, (1) be a body corporate, partnership or unincorporated association; (2) be established and carrying on its business in the DIFC; (3) be Authorized (discussed below) or otherwise permitted by the DFSA to conduct the activities which it intends to conduct while trading on the DME and must provide evidence to the DME of such regulatory status; or (4) have, in the opinion of the Board, good character, commercial standing and business experience. If the applicant intends to trade as principal or agent on the account of any customer or to trade as agent on account of any of its affiliates or of any other member, it must also comply with all applicable DFSA or other regulatory capital requirements and have net capital of not less than $1,000,000 or its equivalent in any other currency.[26]

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[25] Despite being a fully electronic exchange, DME will also allow traders to operate from trading hubs and individual trading stations on the Exchange Floor. The Exchange Floor is not an open-outcry pit trading facility and all orders will be executed through DME Direct.

[26] An applicant must also (1) provide such evidence as requested by the Exchange as to its legal status and organization and as to its ability to become a floor member without breaching applicable laws, regulations and rules; (2) provide the following in the prescribed form or in form agreed to by the Exchange:

> (i) a copy of a resolution, duly certified by the secretary or other authorized officer or partner of the applicant, designating agents for service of process in the DIFC concerning and limited to the Exchange-related activities and business of the applicant and/or employees of the applicant;(ii) a copy of a resolution, duly certified by the secretary or other authorized officer or partner of the applicant, or by the governing body of the applicant, authorizing the application for floor membership and the execution of the documents referred to above and all other documents relating to the applicants floor membership; and(iii) with respect to partnerships, a statement describing the business in which it is engaged and a certified copy of its current partnership agreement. The applicant shall also file certified copies of any and all documents filed with the DIFC authorizing the partnership to conduct business in the DIFC;

(3) agree to be bound by the DME Rules; (4) designate an officer, employee or partner as the Exchange liaison, whom the Exchange may contact in order to obtain additional information or documentation in connection with any matter whatsoever provided in these Rules; (5) do or submit such other things or documents as the Board may stipulate from time to time; (6) if not also a clearing member, have entered into an agreement with at least one clearing member for the clearing of the applicant's trading on the Exchange and provide the Exchange with a copy

Off-floor memberships do not confer equity rights in the Exchange or provide seats on the Exchange Floor, but do provide for lower Exchange fees. Off-floor members have the right to access and to trade on DME Direct off the Exchange Floor – whether from inside or outside the DIFC. Initially, DME will offer 50 off-floor memberships for sale. An applicant for off-floor membership must satisfy the membership criteria set out for floor membership, except that the applicant need not be a body corporate, partnership or unincorporated association or be established and carrying on its business in the DIFC. An applicant for off-floor membership must satisfy the Exchange that it is Authorized, Recognized (discussed below) or otherwise permitted by the DFSA to engage in the activities it intends to conduct while trading on the Exchange and must provide the Exchange evidence of such regulatory status.

Clearing memberships are only available to NYMEX clearing members. Although all NYMEX clearing members are eligible to become DME clearing members, they will not automatically become DME clearing members and need to apply separately to DME for such membership. An applicant for clearing membership must satisfy the clearing member requirements of NYMEX Clearing, must satisfy the DME membership criteria established for off-floor memberships, and must also satisfy the Exchange that is authorized, recognized or otherwise permitted by the DFSA to engage in the activities it intends to conduct while trading on the Exchange and must provide the Exchange evidence of such regulatory status.

B. Authorization and Recognition

The Financial Services Prohibition of the RL 2004 prohibits carrying on financial services in the DIFC unless those engaged in such activities are "Authorized" or "Recognized" by the DFSA. The Financial Services Prohibition is deemed to apply to, among others, the following financial activities when carried on in or from the DIFC: (1) dealing in investments as principal; (2) dealing in investments as agent; (3) arranging credit or deals in investments; (4) managing assets; (5) advising on financial products or credit; and (6) operating a collective investment fund. If a DME member (floor member, off-floor member or clearing member) is physically present in the DIFC, it is required to be authorized by the DFSA. If a DME member has no physical presence in the DIFC, such member must be Recognized by the DFSA.[27] In addition to the DFSA authorization or recognition requirement, DME requires that floor members and off-floor members maintain an account with a clearing member, *i.e.*, they must be guaranteed by a clearing member.

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of each such agreement; (7) provide evidence of its experience and competence; and (8) provide satisfactory evidence to enable DME to comply with its obligations under the applicable AML Requirements.

[27] DFSA regulations include some exclusions to the authorization requirement. One such exclusion is that the DFSA does not require that a commercial trade user who intends to trade only for its own account be Authorized. Seat lessees, being physically present in the DIFC, must be Authorized to the extent that they trade for other than their own account. Their transactions, whether for their own account or the account of a floor member, must be financially guaranteed by a DME clearing member. Seat lessees are bound by the DME Rulebook.

With respect to authorization, RL 2004 requires the DFSA to ensure that any firm applying for DFSA authorization satisfy, and continue to satisfy, the authorization conditions that pertain to all of the financial services for which it has or will have a license. Among the most important authorization requirements are those regarding the suitability of the applicant to carry on the financial service activities for which it has applied, *i.e.*, an applicant for authorization must satisfy the DFSA that it is fit and proper to carry on those activities. In determining whether an applicant is fit and proper, the DFSA may take into account, among other things, an applicant's: (1) integrity (including absence of convictions or civil liabilities); (2) honesty; (3) competence; and (4) financial soundness. The DFSA requires applicants to submit detailed financial and business information in conjunction with an application for authorization to ensure compliance with DFSA's capital requirements.

An applicant must submit a detailed personal information form for its employees engaged in a licensed function, including the Senior Executive Officer, Licensed Director, Licensed Partner, Finance Officer, Compliance Officer, Senior Manager, Money Laundering Reporting Officer, Licensed Representative and Responsible Officer. The form requires disclosure of, among other things, past experience, license or authorization refusals, convictions, disciplinary actions, investigations, and insolvencies.[28] Firms must also seek DFSA approval for certain employees who perform certain key functions with respect to the firm's financial services activities. The application process also requires the firm to inform the DFSA of any person or persons who have control of the firm (Controller).[29] Authorized firms are required to have adequate arrangements in place to ensure that employees are suitable, adequately trained and properly supervised.

The DFSA imposes financial resource requirements upon all Authorized Firms and all applicants for Authorization must demonstrate on-going compliance with the prescribed levels of capital to ensure that there is no significant risk that the member's liabilities cannot be met as they fall due. The financial resources requirements are contained in various regulatory modules and depend on the type of institution, nature, size and complexity of its business (*e.g.*, investment firms, banks, etc.). The primary module applicable to firms incorporated in the DIFC and Authorized by the DFSA in relation to physical commodities is the Prudential Investment, Insurance Intermediation and Banking Business Module, which includes complex rules governing the financial resources requirements applicable to various types of firms or institutions. The financial resources must be of the kinds and amounts specified in, and calculated in accordance with, the applicable DFSA Rule.

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[28] No Authorized person may employ an individual to whom the DFSA has issued an order under RL 2004 indicating that such person is not a fit and proper individual to perform functions relating to financial services activities carried on by that Authorized person or Authorized persons generally.

[29] Generally, a Controller is any person who holds 10 percent or more of the share capital of a firm, or is otherwise entitled to exercise or control the exercise of 10 percent or more of the voting rights at a general (shareholders) meeting of the firm. Once Authorized, a firm must notify the DFSA of, and in many cases seek the DFSA's prior approval to, any change in the identity of its Controllers and the level of control held by them.

With respect to recognition, recognized member status allows firms that are carrying out financial services activities in compliance with their home jurisdictions' requirements to undertake such activities within the DIFC without becoming fully Authorized by the DFSA. This Recognized status allows the DFSA to have certain oversight and enforcement rights with respect to the Recognized member. In determining whether a financial services regulator is satisfactory to the DFSA, the DFSA undertakes a due diligence inquiry of the caliber of regulation and considers whether there are adequate arrangements in place for cooperation between the DFSA and the other regulator. Recognized member status is readily available to firms in Tier 1 jurisdictions[30] including, among others, the U.S. and United Kingdom. Recognized member status is also available to firms in non-Tier 1 jurisdictions upon DFSA approval, on a firm by firm basis, following DFSA review of the financial regulation in the home jurisdiction, so long as the activities the firm will undertake in the DIFC are regulated in the firm's home jurisdiction to a standard acceptable to the DFSA. Thus, many members who wish to trade on DME without having a physical presence in the DIFC will be regulated by a regulator in their home jurisdiction rather than by the DFSA. Notably, DFSA Recognized members must comply with their home jurisdiction regulators' financial requirements.

Upon receipt of a Recognized member application, the DFSA initially researches the applicant and confirms with the DME that the firm is genuinely interested in DME membership. Upon confirmation and satisfaction of the firm's initial due diligence, the DFSA contacts the applicant's home regulator and, to determine if the same activities fall within the scope of the applicant's license in its home jurisdiction, identifies to the home regulator the activities the applicant wishes to undertake in the DIFC. In the case of Recognized member applicants located in the U.S., the DFSA contacts the NFA to obtain confirmation of: (1) the regulatory status of the firm, and (2) any past, present or known future disciplinary record of the firm.

C. Guaranteed Customers

Pursuant to DME Rules, guaranteed customers are permitted to have direct access to DME Direct. Each guaranteed customer is required to maintain an account with a clearing member who financially guarantees the guaranteed customer's transactions. Retail customers are not permitted to trade on DME, and accordingly, no guaranteed customer may be a retail customer or enter orders for retail customers for whom it is authorized to trade.[31] DFSA requires guaranteed customers physically present in the DIFC to be Authorized unless their activities in the DIFC fall within an exclusion. Guaranteed customers not present in the DIFC are not required to be either Authorized or Recognized. However, all guaranteed customers are subject to all relevant DME Rules and must agree, in writing, to be bound by DME Rules. In addition, DME Rules expressly applicable to guaranteed customers mandate that each guaranteed customer shall observe high standards of integrity, fair dealing and market conduct as reflected in the DFSA Rulebook and any guidance published by the DFSA.

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[30] Pursuant to the Collective Investment Law No. 1 of 2006, the DFSA has issued a Recognised Jurisdictions Notice that identifies, among other things, countries and territories that have been accorded Recognized status. The DFSA has advised the DME to use the Recognised Jurisdiction Notice as guidance in determining acceptable jurisdictions, also known as Tier 1 jurisdictions.

[31] Any person who does not meet the definition of client as set forth in DFSA COB Rules 3.2.2 is a retail customer. In general, a client is a person who has been determined by a member to be:

(1) an individual who: (i) has at least $1 million in liquid assets and has provided the member written confirmation of this fact; (ii) has sufficient financial experience and understanding to participate in financial markets; and (iii) has consented in writing to being treated as a client;
(2) an individual who: (i) is an employee of the member; and (ii) meets the conditions in (1)(ii) and (iii);
(3) an entity which has had, or any of whose holding companies or subsidiaries has had, in the last two years, called up share capital or net assts of at least $5 million. In case of a limited liability partnership calculated without deducting loans owning to any of the partners;

III. OVERVIEW OF THE DME TRADING SYSTEM

At the outset, the Division notes that the description of DME Direct set forth herein is based upon representations made by DME or its representatives. The Division has not performed an independent assessment of the security or soundness of DME Direct in connection with this request. Nonetheless, it should also be noted that DME Direct is the brand name of the electronic trading system employed by DME for accessing DME products traded through the NYMEX ClearPort® Trading Services (CPT), which has previously been reviewed by the Commission staff. On January 16, 2003, the Division acknowledged the self-certified submission by NYMEX of proposed new and amended rules in support of the launch of CPT and the Division has not, to date, recommended any alteration in its trading procedures. In addition, Commission staff has previously described CPT in connection with the granting of direct access no-action relief to NYMEX Europe Limited.[32]

A. Introduction

DME Direct is a flexible internet-based electronic trading system developed, maintained and enhanced by NYMEX on the CPT platform in New York.[33] Under the SLMA, NYMEX has provided DME with a license to use the CPT for the trading of DME products on DME Direct. NYMEX, through the NYMEX Customer Service Call Center (NCSCC), provides back-up services including, among other things, resolution of clearing and trading systems issues. The

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(4) a trustee of a trust or pension fund which has had in the last two years assets of at least $5 million calculated by aggregating the value of cash and the investments forming part of the trust's or fund's assts, but before deducting liabilities;
(5) a properly constituted government, government agency, central bank or other national monetary authority of any country or jurisdiction;
(6) a public authority or state investment body;
(7) a supranational organization whose members are either countries, central banks or national monetary authorities;
(8) an Authorized Firm or Regulated Financial Institution;
(9) an Authorized Market Institution, regulated exchange or regulated clearing house;
(10) an entity which is a holding company or subsidiary of an entity listed in (8) or (9) with that entity's consent;
(11) a body corporate whose shares are listed or admitted to trading on any regulated exchange of an IOSCO member country; or
(12) a collective investment fund or special purpose vehicle.

[32] CFTC Staff Letter No. 05-24 (December 16, 2005).

[33] DME anticipates that it will, at some point, transfer the matching engine for DME Direct to the DIFC.

DME Direct trading week commences at 6:00 PM New York time each Sunday (2:00 AM Monday Dubai time) and ends at 5:15 PM New York time each Friday (1:15 AM Saturday Dubai time). DME Direct is closed daily for 45 minutes between 5:15 PM and 6:00 PM New York time. The Board has the discretion to adjust the trading hours to take into account religious holidays in the UAE.

DME Direct, supported by core components, sends and receives messages in FIX formats, stores order and trade data in database tables, matches orders and communicates market data to traders and vendors. The NYMEX Clearing 21 system (C21®) is used to clear DME trades. C21® performs the following functions: (1) calculating margin requirements; (2) producing DME large trader reports; (3) producing regulatory reports; (4) interfacing with clearing members; (5) managing cash transfers for margin calls; and (6) contract administration. C21® produces daily contract facts sheets that list key contract information including open interest, volume, and historical highs and lows.

1. Trading Host and Connecting to DME Direct

The systems supporting DME's trading operations are hosted by servers located in the U.S. and operated and maintained by NYMEX. The systems hosted by NYMEX in New York include: (1) Trade Management System (TMS), used for capturing DME Trades; (2) Price Reporting System (PRS), used for the dissemination of price information from the market; (3) TXN, a computerized surveillance system; and (4) C21®. DME Direct has an "open architecture" through which software application programming interfaces enable market participants to connect DME Direct with their own proprietary system or a system provided by an ISV. Members and guaranteed customers may connect directly to DME Direct via a managed network solution or manage their own direct network connection access via the internet. There are two standard interfaces to DME Direct: NYMEX Order Routing FIX API, used to authenticate and configure orders and receive confirmations, and FIX Market Data API, the interface for real-time market prices.

Every member, seat lessee and guaranteed customer with direct access to DME Direct must register at least one individual with the DME as an Authorized Terminal User (ATU).[34] The ATUs must be trained in the use of DME Direct and serve as contact persons for the Exchange in the event of any problems with DME Direct systems involving the member, seat lessee or guaranteed customer, or if the Exchange has any questions regarding business conducted through a particular DME Direct connection assigned to that member, seat lessee or guaranteed customer. DME Rules set out the requirements for each ATU and provide that ATUs are bound by DME and DFSA Rules.

2. Order Entry and Audit Trail

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[34] As defined in DME Rules, an ATU is a person whom the member, seat lessee or guaranteed customer has designated to serve as terminal operator or otherwise authorized to access the trading platform and whom the member, seat lessee or guaranteed customer has so notified to the Exchange.

Under DME Rules, members, seat lessees and guaranteed customers must promptly make a record of the receipt of a customer order, including information as set out in Conduct of Business (COB) Rules. Immediately upon receipt, all customer orders must be entered into the DME Direct database and programs that accept, match and report execution of orders in DME (Matching System).

DME Direct supports the limit and stop limit order types with the following order duration qualifiers: Day (Single Session), GTC (Good Till Cancelled), and GTD (Good Till specified Date). The following core data is part of each DME order record: commodity; contract month; purchase or sale; account number (or certification that the order is for multiple accounts to be allocated later); quantity; limit price; the clearing member who holds the account for the relevant customer or the member, seat lessee or guaranteed customer if trading on its own account or for the account of affiliates or on an omnibus account basis; strike prices, put or call (for options); and times of order entry and order execution or cancellation. Each order entered on DME Direct must also contain a Customer Type Indicator (CTI), which is used for reporting and compliance analysis and distinguishes for whom and on what type of account the trades are being placed.

All relevant data entered into DME Direct are passed from DME Direct to the post-trade systems and retained by NYMEX in New York for a minimum of five years.[35] All members are required to maintain, for at least six years, records relating to all orders and transactions to which they are a party or which they have executed, forwarded for execution, transferred or assigned, including details of the persons for whom the trade was executed, the parties to it, and the manner in which it was fulfilled, discharged, terminated or executed. Members are required to maintain all such records in permanent hard copy or permanent and readily-retrievable electronic form, unless they are required to keep them in another form by the rules and regulations of any regulatory body to which they are subject.

3. Order Matching Algorithm

The DME Direct matching algorithm utilizes price and time priority, *i.e.*, all orders at the best price level will be filled according to time priority. Because the algorithm utilizes time priority, any order modifications results in the modified order moving to the bottom of the priority list for orders at the same price level. DME Direct also incorporates implied pricing functionality, which integrates bids and offers in spreads and their underlying contracts, to generate additional liquidity and provide the opportunity for price improvement. DME Rules provide that trades in DME Direct are formed at the time of matching in the matching system.

4. Data Dissemination

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[35] DME Direct allows orders entered to be modified and deleted. Some, but not all, data fields can be changed. Order quantity, price, time in force, the specified price for a stop limit order, and expiration date can be altered. The account, symbol, side, order type, and compliance ID data fields cannot be changed. The audit trail captures the times of all order modifications.

NYMEX distributes DME market data to vendors that have signed the standard DME market data distribution agreement. DME products are uniquely identified by the ITC2 (Inter-Exchange Technical Committee) exchange code "DM" and product symbols. Each price change is reported on a real-time basis to market data vendors.

5. System Support

As provided in the SLMA, the NCSCC is operated by NYMEX on behalf of DME. The NCSCC will be available 24 hours each day from Sunday 6:00 PM New York time (2:00 AM Monday Dubai time) until Friday 6:00 PM New York time (2:00 AM Saturday Dubai time) to assist traders with issues regarding electronic trading and clearing. The NCSCC generally has three to five staff members available at any time to field questions and communicate with market participants and provide market support services.

NCSCC provides DME customer support and problem management to members and guaranteed customers designated by clearing members. In order to be designated and eligible for DME Direct support, a guaranteed customer must register with the DME. Upon receipt by the NCSCC of notice from the DME that the DME is satisfied that a guaranteed customer meets the criteria set out in DME Rules, NCSCC allocates passwords to allow the guaranteed customer access.

The DME trade cancellation policy authorizes the NCSCC to mitigate market disrupting events caused by the improper or erroneous use of DME Direct, or by system defects, by adjusting trade prices or canceling ("busting") trades. NCSCC may also adjust trade prices or cancel any trade if the NCSCC determines that failure to do so may have a material adverse effect on the integrity of the market. The decision of the NCSCC is final.

6. System Reliability and Failure Recovery

a. Duplication of Key Components

NYMEX uses the Storage Library System from Digital Equipment Corporation for tape management and has a predetermined schedule for incremental and full back-ups. NYMEX maintains a back-up facility for all of its IT systems at NYMEX's established disaster recovery (DR) facility, which is on a separate power, water, and telecommunication grid from NYMEX's headquarters at the World Financial Center. The main facility and the back-up facility are linked with multiple redundant fiber optics lines, providing completely synchronized communication. NYMEX audits its back-up facilities on a quarterly basis. In adherence to the tape rotation policy, all previous weekday tapes are off-sited to a vaulting facility. Tape retention policy is seven years for all full backups and 60 days for all incremental backups. All backup tapes are retained at NYMEX's main business address and at the DR facility.

NCSCC also performs back-up functions. At the end of the trading day, trade volume summary screens and trade detail screens (Trade Book and Order Book) are accessed by a NCSCC staff member within DME Direct. The screen details are copied and pasted into a spreadsheet to create a daily repository on the LAN of trade activities for use the next trading day so as to address customer inquiries about alleged errant and/or missing trades. Access to the LAN directory is restricted to NCSCC staff and management. The LAN is backed up nightly. In essence, every trade record is copied and stored on a spreadsheet, by trade date, for eventual retrieval by the NCSCC staff should it be necessary to review the trade details.

b. Failure Detection

NYMEX measures and monitors the availability and performance of applications and host systems on a 24-hour basis. Diagnostic systems software notifies IT personnel through alerts as soon as a problem is detected. IT personnel process and correlate the diagnostic software data with other information to analyze the potential problem. The diagnostic system is installed in the Operations Room, where operators observe critical systems via dedicated monitors at all times. In addition, NYMEX uses job-scheduling software to create system application logs for monitoring actual batch submissions and processing, including: (1) jobs scheduled for execution; (2) actual job start and completion times; (3) any abnormal conditions during the execution; and (4) whether jobs were run to normal completion.

NYMEX also has in place systems and procedures for maintaining business continuity in the event of system or network failure. If a serious systems event occurs at NYMEX's primary New York site, the systems for DME Direct can be managed remotely to continue to provide support to DME. In the event that DME cannot be supported, a crisis management team will assess the situation and notify DME of the event. If the problem occurs intra-session and results in discontinuation (or the threat of discontinuation) of trading, the crisis management team will seek to halt markets, notify the DFSA, and monitor the event until it is resolved.

c. Failure and Recovery

NYMEX provides all reasonable assistance to DME in developing, maintaining and implementing an appropriate disaster recovery and business continuity plan to ensure that DME continues to meet the legal, regulatory and accounting requirements and standards applicable to it. NYMEX is required to maintain a business continuity plan for the equipment, systems and power supply, including backup arrangements for both processing and communications resources.

B. Limitation of Liability

DME Rules generally provide (except where liability results from a person's willful misconduct) that none of the Exchange, NYMEX, or their affiliates and any of their respective officers, directors, employees, agents, consultants, information providers, independent contractors or subcontractors, licensors, members and clearing members, shall be liable to any person for any losses, damages, costs or expenses (including but not limited to, lost profit, loss of use, and direct, special, indirect, incidental or consequential damages) arising from: (1) any failure or malfunction, including any liability to enter or cancel orders on DME Direct or delay being able to do so; (2) any failure or malfunction or fault in delivery, delay, omission, suspension, inaccuracy, interruption in connection with furnishing of the Exchange's systems, data made available through those systems or DME services; or (3) any unauthorized access to the Exchange's systems, service or facilities or use of DME Direct; or any person using DME Direct without training or if he or she fails to follow the instructions for use. The same limitations on the liability of DME and NYMEX apply if DME or NYMEX employees, including NCSCC employees, provide services on behalf of NYMEX or DME to members, seat lessees, guaranteed customers, and ATUs. In addition, DME makes no express or implied warranties and does not guarantee continuous, uninterrupted and secure access to DME Direct.

C. Adherence to IOSCO Principles

You represent that, in providing DME Direct to its members, seat lessees and guaranteed customers, DME adheres to the Principles for the Oversight of Screen-Based Trading Systems for Derivative Products developed by the Technical Committee of the International Organization of Securities Commissions (IOSCO) (as adopted by the Commission on November 21, 1990).[36] You represent that DFSA is aware of DME's commitment to the IOSCO principles.

IV. CLEARING AND SETTLEMENT PROCESSES

All contracts executed on DME Direct are submitted for clearing to NYMEX Clearing pursuant to the CSA between NYMEX and DME. As noted earlier, NYMEX is registered with the CFTC as a DCM and as a DCO. In addition, NYMEX is a Recognized Body pursuant to DIFC regulatory law and the Recognition Module of the DFSA Rulebook to operate a Clearing House for a DFSA Authorized Market Institution and to offer electronic access to its exchange products within the DIFC.[37] The CSA specifies clearing and settlement services and service levels and includes escalation procedures to enable DME staff to address any issues concerning the services on a timely basis. NYMEX Clearing clears all trades initiated on DME on essentially the same basis as it clears trades executed on NYMEX.

A. Trade Registration

Each contract executed on DME is a contract between the two DME clearing members to whose accounts the matching positions have been allocated and, on acceptance for clearing by NYMEX Clearing, is replaced by two contracts with NYMEX Clearing: one between the buying clearing member and NYMEX Clearing as seller, and another between the selling clearing member and NYMEX Clearing as buyer. This structure both substantially reduces counterparty credit risk and entirely eliminates the need for traders to make individual credit determinations with respect to potential counterparties before entering into a trade.

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[36] The Commission adopted the IOSCO Principles as a statement of regulatory policy for the oversight of screen-based trading systems for derivative products. Policy Statement Concerning the Oversight of Screen-Based Trading Systems, 55 Fed. Reg. 48670 (Nov. 21, 1990).

[37] NYMEX Clearing is under the jurisdiction of the NYMEX Board of Directors, which is advised by the Clearing House Committee. The Clearing House Committee is co-chaired by two members of the NYMEX Board of Directors and is comprised of twenty five clearing member firm representatives. The Clearing House Committee meets at least monthly, and periodically evaluates the adequacy of the NYMEX Clearing's financial resources. NYMEX Clearing provides clearing services to both the NYMEX and COMEX trading divisions of NYMEX and to DME.

NYMEX Clearing does not have any direct contractual relationship with DME members other than those with which it already has a contractual relationship as NYMEX clearing members. Under the terms of a clearing member qualification, a clearing member must accept financial responsibility for all trades executed as a result of orders entered through the use of the DME Direct password protected system for which it is responsible. Accordingly, NYMEX Clearing is not liable for any obligations of a DME member who is not also a clearing member of NYMEX, or for any obligation of a clearing member to a DME member or customer, or for any obligation of a clearing member to another clearing member for whom the former is acting as broker. Furthermore, NYMEX Clearing is not be liable to customers of DME members to make or take deliveries or otherwise.

B. Clearing Process

NYMEX Clearing conducts clearing through its C21® system, developed jointly with the Chicago Mercantile Exchange (CME) and introduced in 1999. This system is highly flexible and is expected to support any anticipated growth in volume or business expansion over the next five to ten years. The C21® system was upgraded in autumn 2001 to permit clearing member access via the internet, as well as to accommodate an enhanced product base, including the clearing of OTC contracts. It enables NYMEX to perform functions relating to banking, settlement, asset management, delivery management, position management and margins. C21® was upgraded at the beginning of 2006 and improved its functionality by moving into a Windows environment, making it more efficient and flexible. C21® covers contracts executed at all NYMEX trading venues, including the New York trade floor and electronic trading platforms, including DME Direct.

C. Settlement Prices

Daily settlement prices for contracts traded on DME are determined by the DME pursuant to procedures set forth in its Rules that closely parallel NYMEX's price settlement procedures, including the use of an average weighted price for contracts meeting certain liquidity thresholds.[38] Under DME Rules, the Exchange must notify NYMEX Clearing of the daily settlement price determined by the Exchange and NYMEX Clearing uses the settlement price in the calculation of original and variation margin, unless NYMEX Clearing reasonably believes that it is clearly erroneous, in which case it notifies the Exchange with a view to agreeing on an appropriate daily settlement price or, in the absence of such agreement, it notifies the Exchange of the settlement price it will use.

D. Margin and Banking Arrangements

NYMEX Clearing collects both original margin and variation margin with respect to clearing members on a daily basis. Original margin is collected at least once daily, at noon New York time, based on open positions as of 10:00 AM New York time. Variation margin is collected at least twice daily: at 10:00 AM New York time based on open positions as of 7:00 PM New York time the previous day and the previous day's settlement price and intra-day based on market prices as of 11:00 AM New York time. The original margin requirement is a function of a clearing member's open positions and the margin rate. The margin rate is set by NYMEX Clearing using Standard Portfolio Analysis of Risk (SPAN), developed by the CME and used by commodity clearing houses worldwide. Variation margin is calculated as being the difference between the trade price and the settlement or market price used for the particular variation margin call. In accordance with the standards set out in the CSA, the Financial Surveillance & Risk Management Division of the NYMEX Compliance Department conducts, on a daily basis, a detailed review of each clearing member's variation margin, earmarking stress thresholds and making inquiries if needed. NYMEX Clearing Rules allow clearing members to post original margin using cash, various securities (subject to a haircut) and certain money market mutual funds. All variation margin must be posted in cash.

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[38] In practice, NYMEX determines the daily settlement prices on DME's behalf.

NYMEX Clearing acts as a fiscal transfer agent, transferring money from the customer or proprietary settlement accounts of its clearing members who have experienced net losses in either of those account origins to the customer or proprietary settlement accounts of those members who have generated net gains in either account origin. As required by the CFTC, NYMEX Clearing segregates margin deposited by clearing members from their customer accounts from margin received from their house accounts.[39] Pursuant to a Section 4d order issued by the Commission on May 23, 2007, NYMEX holds DME customer positions and NYMEX customer positions in the same customer segregated accounts. NYMEX Clearing verifies, on a daily basis, that the cash it maintains is sufficient to cover its obligations to clearing members in accordance with the CFTC's segregation rules.

E. NYMEX Financial Resources

NYMEX, is AA+ credit rated by Standard & Poor's and, as of June 30, 2006, was holding performance bond (margin) totaling $20.7 billion, of which $15.7 billion was customer segregated funds and $5.0 billion was house funds. NYMEX maintains a Guaranty Fund which, as of July 1, 2006, had a minimum balance of $200 million.[40] In addition, NYMEX maintains a $115 million default insurance policy with AA rated Radiance Asset Assurance, Inc., for losses in excess of $200 million and, if there is a shortfall in the Guaranty Fund, NYMEX has limited powers to assess its clearing members to replenish the fund. The maximum assessment permitted is the lesser of: (1) 40 percent of the clearing members' regulatory capital; or (2) $30 million. The maximum total assessment power as of June 30, 2006 was approximately $1 billion. NYMEX is currently finalizing the terms of a $60 million short-term liquidity facility, the primary purpose of which is to provide immediate funding to meet daily settlement requirements in the event of a clearing member default. Access to the facility will allow time for an orderly liquidation, if necessary, of the non-cash assets maintained in the Guaranty Fund.

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[39] NYMEX Clearing requires clearing members to collect margin from their customers at set percentages in excess of the clearing members' requirement.

[40] Each clearing member must contribute to the Guaranty Fund in an amount based on a hybrid formula of clearing member risk and volume, calculated quarterly, with a minimum clearing member contribution of $2 million. Contributions can be made in cash, U.S. government securities, or shares of approved money-market mutual funds.

Currently there are 40 clearing member firms which guarantee the performance to NYMEX Clearing of non-clearing members and customers. All NYMEX clearing members must own a minimum of two NYMEX memberships, must hold and maintain the related shares of common stock in NYMEX Holdings, and must have a minimum of $5 million in working capital (or adjusted net capital in the case of FCMs). The aggregate regulatory capital of the clearing members, which represents a potential financial resource to support NYMEX's clearing operations, was $110.6 billion as of May 31, 2006.[41]

In addition, NYMEX imposes capital-based position limits on each clearing member. The position limits are based upon the "modified capital" of a clearing member, which may be higher or lower than regulatory capital. A clearing member with a parent guaranty or letter of credit can have a modified capital level that is higher than regulatory capital, subject to a cap of $1 billion, which may be waived in circumstances where the clearing member is a subsidiary of a highly capitalized and highly rated financial institution. These capital-based position limits are applied as follows: "position risk" (*i.e.*, the SPAN performance bond requirement for the net positions carried by the clearing member) is limited to 200 percent of a firm's modified capital for the customer account; 100 percent for the house account; and 250 percent on a combined basis. If a clearing member exceeds these limits, it must deposit "super margin" on the excess, provided that a clearing member may not exceed 300 percent of modified capital for the customer account, 150 percent for the house account and 350 percent on a combined basis.

F. Default Arrangement

The Exchange's arrangements for dealing with a defaulting member are based on the DFSA Default Rules requirements and complement the NYMEX Clearing arrangements. Under the Default Rules, designed to protect the actions taken by market authorities to deal with the consequences of the default or insolvency of one or more market participants, an AMI must have rules that allow it to close-out open positions by discharging the appropriate rights and liabilities of transactions which a person granted access to its facilities cannot, or may not, be able to fulfill. Market authorities are not required to wait for formal insolvency proceedings to commence before making a declaration that a member is in default, so long as they believe, in good faith, that the member will be unable to meet future obligations under market contracts. All actions taken by AMIs in good faith under their respective default rules are protected and not open to challenge by liquidators or other insolvency officials.

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[41] Clearing members are required to submit regulatory capital calculations and financial statements to NYMEX on a regular and timely basis. FCMs electronically file financial statements, including a balance sheet, income statement, change in ownership and segregated funds report, on a monthly basis. Non-FCM clearing members file similar information quarterly. NYMEX conducts a formal analysis of all filings. In addition, NYMEX conducts an audit, at least annually, of all clearing members for which it acts as the designated self-regulatory organization. If a clearing member's financial condition weakens, or it takes on excess risk, NYMEX may require additional margin to be posted and/or restrict the member's trading.

The NYMEX default rules, rather than DME default rules, apply to contracts to which NYMEX Clearing is a party. If, therefore, a clearing member were to default, NYMEX Clearing default rules would apply to the registered contracts, while DME Rules would apply to the back-to-back contracts between the defaulting clearing member on the one hand and clients and/or non-clearing members for which the defaulting clearing member clears on the other hand. If a non-clearing member were to default, only DME Rules would apply as NYMEX would have no contractual nexus with such defaulting member.

Pursuant to NYMEX's Rules, in the event of a clearing member default, the President of NYMEX, with the approval of NYMEX's Board of Directors, may close out all or any part of the clearing member's positions in the best interest of NYMEX and the defaulting clearing member. In addition, NYMEX Clearing may apply against the defaulting clearing member's obligations the clearing member's: (1) margin on deposit, (2) deposit in the NYMEX Guaranty Fund, and (3) any other assets of the defaulter under the control of NYMEX. NYMEX Clearing may apply these assets based on the type of default by the clearing member, as follows: (1) for defaults in the customer segregated account, NYMEX Clearing may use all assets of the defaulting clearing member; and (2) for defaults in the clearing member's house account and or customer non-regulated accounts, NYMEX Clearing may use that portion of the assets held in the defaulter's house and/or customer non-regulated accounts. If these assets are not sufficient, NYMEX Clearing Rules provide that NYMEX will utilize other substantial financial resources (discussed above), such as its Guaranty Fund and default insurance, to meet the obligations of the defaulting clearing member. In addition, NYMEX may obtain funds from any guarantee provided by a parent company of the defaulting clearing member (if applicable) and from a sale of the defaulted clearing member's equity in NYMEX.

V. OVERVIEW OF THE REGULATORY STRUCTURE IN THE DIFC

A. Introduction

The DIFC was created and vested under UAE federal law with the authority to create a legal and regulatory framework for all civil and commercial matters conducted within the DIFC. Responsibility for Financial Services[42] legislation and broad policy lies with the DIFC President,[43] with the assistance of the DFSA. As prescribed by RL 2004, the DFSA regulates all financial and ancillary activities undertaken in or from the DIFC. Under this mandate, the responsibility for authorizing persons to conduct investment business, and the regulation of those persons, rests with the DFSA.

The DFSA fulfills its regulatory responsibilities within the framework established by the RL 2004 and DIFC regulations and orders. In addition, DFSA has promulgated a Rulebook governing activities in the DIFC. The Rulebook is composed of modules covering several subject areas, with each specifying its scope and to whom it applies. The modules include the General Module (GEN), Conduct of Business Module (COB), Authorization Module (AUT) and Enforcement Module (ENF). Although DFSA regulates all financial activities within the DIFC, some of the modules rules only apply to entities physically present in the DIFC (Authorized Firms), while others apply to all entities that undertake financial activities in the DIFC. For instance, the GEN Rules dealing with general provisions, financial services and information sharing requirements with the DFSA apply to Authorized and Recognized members and provide for the jurisdiction of the DFSA as defined by the financial services it regulates. Similarly, the ENF rules also apply to Recognized members to enable the DFSA to enforce its oversight over such members. Recognized members, however, are not subject to the COB because, as previously noted, Recognized members are located outside the DIFC and are expected to comply with the applicable conduct of business rules of their home jurisdiction regulator.

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[42] The term "Financial Services" is defined by the DFSA and refers to specified activities carried on in relation to categories of investments as set out in the DFSA Rules. Financial services include dealing in, arranging deals in, advising on and certain other kinds of business in various types of securities, derivatives and other investment products.

[43] The President of the DIFC is His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Ruler of Dubai.

B. Investor Protection

In addition to RL 2004, the ML 2004 contains statutory investor protection measures that prohibit any person in the DIFC, any person outside the DIFC whose conduct affects the DIFC markets, or users of the DIFC markets, from: (1) engaging in fraud and market manipulation; (2) making misleading or untrue statements; (3) engaging in misleading or deceptive conduct; (4) making misleading or deceptive statements; (5) making statements about future matters; (6) inducing persons to deal in investments by, among other things, making false statements or concealing material facts; (7) engaging in insider dealing;[44] and (8) providing inside information.

The DFSA is required to enforce these investor protection measures and has incorporated these provisions within its Rulebook. Some of the DFSA Rules relating to investor protection are included in the COB and are only applicable to Authorized firms. However, the DFSA has broader enforcement powers under the ENF, which is applicable to both Recognized and Authorized firms and, therefore, the DFSA can act if it suspects any possible violations of ML 2004. In addition, DME Rules mandate that, whether or not a member is an Authorized firm, each member shall observe high standards of integrity, fair dealing and market conduct as reflected in the DFSA Rulebook and any guidance published by the DFSA.

The DFSA does not have the authority to intervene in the DME market and direct the actions of DME market participants, but it does have the power to direct the DME to intervene.[45]

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[44] While not termed insider trading ("insider dealing" in DIFC law and "undeclared information which might affect price" in UAE Federal law), this conduct is prohibited in both the DIFC and on other UAE exchanges. However, in broad terms, the prohibition only relates to securities and not commodities investments, and as such trading in DME products is excluded from the DFSA and UAE insider dealing rules.

[45] Article 9 of ML 2004 Law provides as follows: (1) Without limiting the application of the Regulatory Law, the DFSA may by written notice direct an AMI to do or not do specified things that the DFSA considers are necessary or desirable to comply with the Law or ensure the integrity of the financial services industry in the DIFC, including but not limited to directions: (a) requiring compliance with any duty, requirement, prohibition, obligation or responsibility applicable to an AMI; or (b) requiring an AMI to act in a specified manner in relation to transactions conducted on or through the facilities operated by an AMI, or in relation to a specified class of transactions.

The DFSA monitors market activity to ensure compliance with the market conduct standards set out in ML 2004 and, if it identifies any potential market misconduct, it may direct the DME, as an AMI under the DFSA's jurisdiction, to take appropriate measures.

C. Conduct of Business

Under the RL 2004, the DFSA must establish conduct of business and other rules and monitor compliance with those rules. Accordingly, the DFSA has adopted detailed rules applicable to Authorized firms, including rules relating to: (1) the handling and recording of customer complaints; (2) the responsibility of a firm for its employees and agents; (3) solicitation, advertising and publishing, including detailed restrictions on cold-calling; (4) risk and product information disclosure; (5) contents of customer agreements, including provisions for discretionary accounts; (6) "know your customer" and suitability of investment products of customers; (7) disclosure of material interests; and (8) disclosure of charges and other remuneration. The DFSA has also established Principles for Business (Principles)[46] which articulate standards for Authorized firms in areas such as integrity, skill, care and diligence, management, systems and controls, resources, market conduct, information and interests, conflicts of interest, suitability, customer assets and money and relationship with regulators.

D. Treatment of Customer Funds and Property

All Authorized firms (including all Authorized members) who receive or hold money from or on behalf of clients in the course of providing financial services are required to comply with the DFSA's Client Money Rules set forth in the COB. This requires client money to be protected in the event of the insolvency of the Authorized firm.[47] Authorized firms must comply with the Client Money Rules if they hold and control money for: (1) a client who is an individual (other than an individual who has opted out of Client Money Rules by written consent); (2) any client in connection with discretionary investment management services; and (3) any other client to whom the Authorized firm has agreed to provide the protections conferred under DFSA Client Money Rules. Such clients are referred to as segregated clients.

COB Rules require Authorized firms to keep client money in a separate client account and not to mix the client money of segregated clients with the Authorized firm's monies.[48] Detailed requirements relating to client money include the requirement to reconcile client accounts at least once every 25 days.[49] An Authorized firm must: (1) reconcile the individual credit ledger balances, client account cash book balances, and the third party agent client account balances; (2) check that the balance in the client accounts as at the close of business on the previous day was at least equal to the aggregate balance of individual credit ledger balances as at the close of business on the previous day; and (3) ensure that all shortfalls, excess balances and unresolved differences, other than differences arising solely as a result of timing differences between the accounting systems of the third party agent and the Authorized firm, are investigated and, where applicable, corrective action taken as soon as possible.[50]

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[46] *See* note 51.

[47] Client money is defined as money which, in the course of carrying on investment business, a firm holds in respect of any investment agreement entered into, or to be entered into, with or for a client, or which a firm treats as client money in accordance with the Client Money Rules (*e.g.*, money not immediately due and payable to the firm for its own account).

[48] A client account is defined as an account which: (1) is held with a third party agent; (2) is established to hold client assets; (3) is maintained in the name of; (i) if a domestic firm, the Authorized firm; or (ii) if a non-domestic firm, a nominee company controlled by the authorized firm; and (4) includes the words "Client Account" in its title.

[49] The reconciliation must include: (1) a full list of individual segregated client credit ledger balances, as recorded by the Authorized firm; (2) a full list of individual segregated client debit ledger balances, as recorded by the Authorized firm; (3) a full list of unpresented checks and outstanding deposit; (4) a full list of client account cash

The treatment of non-cash collateral in the event of the insolvency of the Authorized firm depends on the terms on which it has been deposited with that firm (and on the terms that the Authorized firm has deposited it with others, such as a custodian or clearing house). COB Rules impose detailed custody requirements of customers' investments, to include giving the member the responsibility for safekeeping documents of title and certificates and requiring the registration of investments in the customer's name or in another appropriate manner to safeguard client investments. A number of disclosures must also be made to the customer in certain circumstances so that the customer understands the custody arrangements. These include: (1) the basis of any terms governing the manner in which the collateral will be held, including any rights which the firm may have to dispose of the collateral; (2) if applicable, that the collateral will not be registered in that client's own name (from which it follows that there is no requirement that the collateral will be so registered); (3) if applicable, that the firm proposes to return to the client collateral other than the original collateral or original type of collateral; and (4) in the event of insolvency, any excess collateral will be sold and the resulting funds will be distributed in accordance with the DFSA Client Money Distributions Rules.

E. Market Integrity

COB Rules prohibit Authorized members from trading accounts that are the subject of investment research until customers have had an opportunity to act upon such research. COB Rules also prohibit Authorized members from churning contracts. They also require strict recordkeeping of each transaction so that a full audit trail is established. In addition, ML 2004 makes it an offense to make a misleading or untrue statement, or to refrain from disclosing a fact that is necessary to make the statement not misleading, which significantly affects, or would reasonably be expected to have a significant effect on, the market price or value of investments.

The power to initiate prosecutions for these offenses lies with the DFSA, which also has the power to obtain injunctions to prevent violations of RL 2004 provisions. The maximum fines for these offenses are potentially unlimited. ML 2004 provides for various market abuse offenses and allows the DFSA to impose unlimited fines on any regulated or unregulated firm or other person for certain types of behavior occurring with respect to various investments,

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book balances; and (5) formal statements from third party agents showing account balances as at the date of reconciliation.

[50] An Authorized firm must perform the reconciliations within 10 days of the date to which the reconciliation relates. A member firm may agree with any client to opt out of the client money rules as long as there is written consent from that client.

including: (1) fraud or market manipulation, (2) misleading or deceptive conduct, and (3) inducing a person to deal under false statements or promises or forecasts.

F. Other Customer Protections and Standards of Conduct

In addition to the COB Rules, the DFSA has set out a number Principles that must be followed by Authorized firms.[51] Firms must also comply with DFSA Rules of general application, such as those contained in the GEN and Anti-Money Laundering Module (AML). The COB and AML Rules include: (1) a requirement to identify your customer; (2) a best execution requirement; (3) a prohibition on churning; (4) rules on disclosure of material interests; (5) rules regulating customer order priority; (6) rules on aggregation and allocations; (7) rules designed to ensure suitability; (8) a requirement to maintain compliance procedures; and (9) rules requiring that confirmation of transactions and periodic statements be provided to customers.[52]

The DFSA Rules comport with and complement UAE federal laws, in particular Federal Law No. 4 of 2002, which criminalizes money laundering in the UAE,[53] and Federal Law No. 1 of 2004 regarding anti-terrorism within the UAE. DFSA Rules specifically require firms to establish and verify the identity of any customer with or for whom the firm acts or proposes to act. In establishing and verifying a customer's true identity, a firm must obtain sufficient and satisfactory evidence on a risk-based approach. The membership section of the DME Rulebook sets out specific requirements for members to comply with to ensure compliance with the DFSA

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[51] These Principles are articulated as follows: Principle 1 — Integrity: An Authorized firm must observe high standards of integrity and fair dealing; Principle 2 — Due skill, care and diligence: In conducting its business activities an Authorized firm must act with due skill, care and diligence; Principle 3 — Management, systems and controls: An Authorized firm must ensure that its affairs are managed effectively and responsibly by its senior management. An Authorized firm must have adequate systems and controls to ensure, as far as is reasonably practical, that it complies with legislation applicable in the DIFC; Principle 4 — Resources: An Authorized firm must maintain and be able to demonstrate the existence of adequate resources to conduct and manage its affairs. These include adequate financial and system resources as well as adequate and competent human resources; Principle 5 — Market conduct: An Authorized firm must observe proper standards of conduct in financial markets; Principle 6 — Information and interests: An Authorized firm must pay due regard to the interests of its customers and communicate information to them in a way which is clear, fair and not misleading; Principle 7 — Conflicts of interest: An Authorized firm must take all reasonable steps to ensure that conflicts of interest between itself and its customers and between one customer and another are identified and then prevented or managed in such a way that the interests of a customer are not adversely affected; Principle 8 — Suitability: An Authorized firm must take reasonable care to ensure the suitability of its advice and discretionary decisions for customers who are entitled to rely upon its judgement; Principle 9 — Customer assets and money: Where an Authorized firm has control of or is otherwise responsible for assets or money belonging to a customer which it is required to safeguard, it must arrange proper protection for them in accordance with the responsibility it has accepted; Principle 10 — Relations with regulators: An Authorized firm must deal with regulators in an open and co-operative manner and keep the DFSA promptly informed of significant events or anything else relating to the Authorized firm of which the DFSA would reasonably expect to be notified.

[52] Authorized firms are also required to take reasonable steps to ensure that communication of information and marketing material is clear, fair and not misleading. The contents of documentation provided by an Authorized firm to a customer are also regulated under COB Rules.

[53] Article 3(1) of Federal Law No. 8 of 2004 explicitly provides that UAE Law No. 4 of 2002 applies to all activities within the DIFC.

Rules, UAE Law and DME internal requirements relating to customer identity. Records of verification evidence must be maintained by the member, as required, for at least 6 years after termination of the relevant membership.

G. Regulation of DME as an AMI

DME is an AMI under the DFSA pursuant to RL 2004. RL 2004 established a principle-based framework for the licensing and supervision of AMIs and for taking regulatory action against those institutions. This framework is supplemented by supervisory powers and other requirements relating to AMIs specified in ML 2004. Based on RL 2004 and ML 2004, DFSA promulgated the AMI Module of the DFSA Rulebook regulating the activities of the AMIs.

To be licensed as an AMI, and to maintain that status, an exchange must satisfy the DFSA, on an ongoing basis, that it meets the requirements set out in the DFSA's AMI Module. The AMI Module requires an exchange to ensure that business conducted on its facilities is conducted in an orderly manner so as to afford proper protection to market participants. Furthermore, the exchange is required to have in place adequate systems and controls concerning the transmission of information, the assessment and management of risks to the performance of the exchange's functions and the effecting and monitoring of transactions executed on or through the exchange. The exchange is also required to provide, or to make arrangements for a third party to provide, clearing and settlement of exchange transactions.

An exchange is required to monitor compliance with and enforce its rules, which is generally achieved through disciplinary action against members for non-compliance.[54] The exchange is also required to cooperate with other regulatory bodies, by the sharing of information or otherwise, to maintain high standards and prevent abuse. An exchange must ensure that satisfactory arrangements are in place for securing the timely discharge of the rights and liabilities of the parties to transactions conducted on or through its facilities. To that end, DME has chosen to outsource the provision of some of these services to NYMEX, a Recognized Body under the DFSA Rules.

RL 2004 makes AMIs accountable for their actions to the DFSA and gives the DFSA the powers of direction over AMIs. The DFSA exercises this oversight in a number of ways, the central element of which is an ongoing assessment of whether an AMI's rules, procedures and practices are adequate for the protection of investors and the maintenance of an orderly market. To this end, the DME is required by the RL 2004 to report the conduct of and the performance of the Exchange's regulatory functions.[55] The DME is also required, by the AMI Module, to consult with and gain prior approval from the DFSA for any amendment to its business rules.[56] DME is also required to consult with the DFSA regarding the introduction of new products and trading mechanisms.

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[54] Sanctions available to the DME pursuant to its Disciplinary Rules include censure, fines of no more than $1,000,000, and suspension of membership rights and privileges.

[55] As an AMI, DME is required to have effective arrangements for the investigation and resolution of complaints in connection with the performance, or failure to perform, any of its regulatory functions. Accordingly, DME Rules require the Exchange to investigate and resolve such complaints. Among other things, the Rules require objective consideration of the complaint, a timely response thereto, a fair and impartial investigation and preparation of a report.

The DFSA carries out risk assessments of the DME on at least an annual basis. This assessment helps to identify any regulatory risks that DFSA perceives may exist and to communicate those identified risks to DME. The DFSA expects DME to put into place a plan to ensure that the risks are acknowledged and either eliminated or mitigated to the satisfaction of the DME's governing body and the DFSA. The DFSA has produced formal guidance setting out what it considers the AMI license requirements to mean in practice, including guidance on "proper markets" with respect to on-exchange business.

H. Regulation by DME

1. Introduction

Under the DME's regulatory regime, all members and guaranteed customers, regardless of their presence in DIFC, DFSA status, or home jurisdiction, are governed by DME Rules. The construction of DME Rules or disputes arising thereunder is governed by DIFC law, with the exception of those Rules governing the terms of the contracts to be traded on the Exchange. Rules relating to contract terms are governed by the same law that governs the contract itself.[57] Issues relating to whether a contract exists are determined by DIFC law pursuant to DME Rules. NYMEX Rules, including default rules and margin requirements, which are governed by New York law, apply to NYMEX clearing members and to any default by a clearing member on DME contracts, once they have been accepted by NYMEX for clearing.

Under DME Rules, any claim, dispute, grievance or controversy arising out of DME Rules, or out of or in connection with market contracts,[58] falls under the exclusive jurisdiction of DIFC courts (whether applying English or DIFC law). However, DME has discretion to take proceedings in any competent jurisdiction. In addition, DME Rules create an exception to the above and provide that any federal or state court located in New York, New York shall have exclusive jurisdiction to settle any dispute, claim, grievance or controversy involving NYMEX arising out of, or in connection with DME Rules.

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[56] In urgent cases, the DFSA may, on written application by the AMI, dispense with prior consultation requirements.

[57] Pursuant to DME Rules, English law governs the DME's Oman Sour Crude futures contract, West Texas Intermediate versus Oman Financial Spread futures contract, and Brent versus Oman Financial Spread futures contract. Any obligations associated with delivery of the underlying commodity under the contract are also governed by English law.

[58] A market contract is defined as "a contract in the terms of an Exchange Contract entered into by a Member or Designated Non-Member which is either: (i) a contract made on the Exchange; (ii) a contract made on an exchange to whose undertaking the Exchange has succeeded whether by amalgamation, merger or otherwise; or (iii) a contract in the making which the Member or Designated Non-Member was subject to the Rules."

DME Rules provide for mandatory arbitration for disputes between members if the dispute arises out of transactions executed on the DME or relates to the business of such member on the Exchange. In disputes between members and customers that arise out of transactions subject to DME Rules, arbitration is mandatory upon the election of the customer. The location of any arbitration proceeding under DME Rules will be London, England, and any proceeding will be conducted subject to English law, specifically the Arbitration Act of 1996.

2. Trading on DME

Modeled after NYMEX trading rules, notably NYMEX's trade practice rules relating to trading standards, DME Trading Rules govern trading on the Exchange. DME contracts are competitively traded via DME Direct.[59] Market participants may also negotiate exchange of futures for swaps (EFS) or exchange of futures for physicals (EFP) transactions in designated DME contracts off of the Exchange pursuant to DME Rules and post an EFS or EFP transaction to NYMEX through NYMEX ClearPort Clearing (CPC).

3. Market Integrity and Investor Protection

DME has implemented a monitoring and surveillance program that includes floor surveillance, member monitoring, trade practice surveillance, market surveillance, and financial and risk management. This program covers the activities of members and all other participants who have direct access to DME Direct, including seat lessees, guaranteed customers and ATUs. On a day to day basis, DME's CCO, supported by the Director of Membership Surveillance and the Manager of Market Surveillance, is responsible for ensuring the effectiveness of the monitoring and surveillance programs. The performance of financial surveillance of members is aided by NYMEX and, under the terms of the GSA, NYMEX also assists the DME in performing trade practice surveillance, market surveillance and financial surveillance. DME, however, maintains overall control of the monitoring and surveillance programs.

With respect to floor surveillance, the DME's Member Surveillance Department (MSD) routinely observes traders engaged in electronic trading from hubs and individual trading stations on the Exchange Floor at random times during the trading day and when and if special market conditions exist. Among other things, floor surveillance is used to: (1) determine affiliations between members and users, (2) identify unusual trading patterns for particular members or other users, and (3) monitor members' activities on the floor. DME compliance staff also has the ability to conduct audio surveillance and monitor the telephone conversations of floor members if the need arises.

Under DME Rules, members must afford the DME CCO access to documents, information, premises and personnel. MSD monitors members for compliance with DME Rules by reviewing documents and materials provided by members, visiting member premises and interviewing member personnel. The member monitoring program covers areas such as order handling, audit trails, client documentation of terms of business and customer agreements, business conduct, member's own surveillance programs and back office processes. The MSD reviews member order handling procedures for consistency with DME Rules and such COB requirements as prevention of market misconduct. MSD also reviews member recordkeeping procedures to ensure the audit trail complies with DME Rules requiring an accurate and comprehensive audit trail of member activities in DME products.

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[59] DME Rules provide that no ATU shall make any purchase or sale, or enter an order through the trading platform, to affect a trade that has been pre-arranged. DME Rules provide a limited exception for trades effected through pre-execution discussions.

The DME CCO is responsible for detection and investigation of potential abuses in trading on DME and for enforcement against such abuses. MSD, DME Market Surveillance Department (MktSD), NYMEX Trading Practice Division (NYMEX TPD) and NYMEX Market Surveillance Division (NYMEX MSD) provide support to the CCO. The MSD conducts electronic trade practice surveillance to protect and detect breaches of DME Rules and applicable law in the DIFC relating to market misconduct and anti-money laundering. NYMEX TPD, with the assistance of NYMEX MSD, conducts computerized trade practice monitoring and surveillance. NYMEX uses its computerized surveillance program, TXN, to detect possible trading violations and to assist in the investigation of trade practice abuses. TXN permits analysts to select default or customized parameters to create reports that focus on particular types of trading violations, members, or suspected patterns of violations. Specifically, TXN is used to detect practices such as trading ahead, pre-arranged trading, "unfair" fill prices, fraudulent trading activity on day trading accounts, and abusive cross trades.

MktSD conducts market surveillance for DME, including monitoring of futures and cash market prices, market news, volume and open interest and data on positions in each DME contract. For price monitoring, analysts monitor market developments, changes in futures and cash prices, and spread relationships in the DME market. MktSD uses third-party data providers such as the Bloomberg News Service, which provides real-time news, cash market prices and the ability to chart historical price relationships for the DME markets. Research concerning market participants is conducted on the Nexis computer database. Analysts also consult with a computerized record of historical Exchange prices, the data sheet, and review trade publications. MktSD also monitors volume and open interest, reviewing the previous day's trading volume and open interest for DME contracts on a daily basis. Volume data for DME contracts is available online and can be sorted by contract and trade date. Open interest data can be obtained from Daily Open Interest Reports generated by NYMEX. Exception reports generated by the NYMEX Large Trade Reporting system enable the analysts to determine what percentage of open interest a reportable trader's position represents. NYMEX's Statistics Department provides historical data on price, volume, and open interest to MktSD analysts, who can also access intra-day volume data through TMS and a daily "snap shot" of positions of any NYMEX clearing member.

NYMEX Clearing rules require clearing members, omnibus accounts and foreign brokers to provide NYMEX and the CFTC with close of business position data for all accounts which exceed reportable levels. These NYMEX Clearing rules apply to DME contracts and, thus, any DME member or other market participant whose positions exceed reportable levels reports to NYMEX required information on a daily basis. NYMEX in turn makes DME large trader reporting data available to the CFTC for financial surveillance purposes.[60] To enhance detection of breaches of DME Rules, DME consults with NYMEX on a weekly basis to review all large trader exception reports.

DME will receive assistance with respect to financial surveillance and risk management from NYMEX, which has extensive surveillance and compliance operations and procedures to monitor and enforce compliance with the NYMEX Clearing rules and DME Rules pertaining to the trading, position sizes and financial condition of members. NYMEX Clearing has extended its daily, weekly, monthly and periodic surveillance operations to trades entered into on DME pursuant to the GSA. Under the GSA, NYMEX conducts ongoing financial surveillance and risk management and analysis of members to ensure they comply with DME and NYMEX financial rules.

4. Disciplinary Arrangements

DME monitors compliance with its Rules and settlement arrangements through a combination of its own resources and those of NYMEX. DME's Disciplinary Rules provide that enforcement of such compliance is the responsibility of DME's Compliance Department. NYMEX provides further support, particularly in relation to information sharing and investigative assistance. The CCO takes the lead on all investigations and disciplinary matters (other than certain summary action).

DME's Disciplinary Rules are largely the same as those at NYMEX, but they have been adapted to comply with the requirements of the DFSA. Pursuant to its Rules, DME has procedures to deal effectively with complaints about the conduct of its members and guaranteed customers. Such complaints and any potential rule violations uncovered as a result of its surveillance regime are investigated promptly and rigorously by the Compliance Department. The investigative process itself is subject to careful review by the Disciplinary Committee, comprised of a chairman, four committee members (including one person who is not a director, officer or employee of any member or of any affiliate of any member), and an alternate (who must be a person who is not a director, officer or employee of any member or of any affiliate of any member). If the Compliance Department and Disciplinary Committee are satisfied that there is a reasonable basis to conclude that a rule violation has occurred, disciplinary action is taken. Potential rule violations may also be referred to other regulatory authorities for action as appropriate.

The Disciplinary Rules provide for a respondent's case to be heard and decided fairly and impartially, within a reasonable time, and for a respondent to be penalized appropriately if found to have breached a Rule. Possible sanctions include censure, fines of not more than one million dollars, orders of restitution and suspension of, or expulsion from, membership or access to DME's facilities (or some combination of these sanctions), and reflect the seriousness of the offense.[61] In all disciplinary cases, DME's decision may be appealed to an independent and impartial Appeal Committee composed of three members. The chairman and alternate must be lawyers by profession, with at least ten years practice, who have relevant experience and who are not a director, officer or employee of any member or any affiliate of any member. The procedures for hearing such appeals are designed to ensure that an appellant's case is dealt with promptly and fairly.

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[60] In connection with large position monitoring, NYMEX retains the data in a data bank known as the Large Trader Reporting system which generates various reports that both DME and NYMEX use, including the Customer Position Ranking Report and the Futures Open Exception Report.

VI. INFORMATION-SHARING

The DFSA mandates that an AMI must be able and willing to co-operate with the DFSA or other appropriate regulatory authorities with regard to regulatory matters when required. In obtaining Authorization from the DFSA, DME has satisfied the DFSA of its ability and willingness to do so. DFSA guidance states that in assessing this cooperation, the DFSA may have regard to the extent to which the constitution and rules of the AMI enable it to obtain information from members and to disclose otherwise confidential information to the DFSA and other appropriate bodies and whether the AMI participates in appropriate international forums. You represent that DME has taken steps to enter into agreements to fulfill this information sharing obligation and has various Rules to facilitate such cooperation.[62]

As set forth more fully below, pursuant to the terms and conditions of the no-action relief provided herein, the Division will be entitled to receive certain specified information regarding DME, DME Direct and DME's market participants directly from DME. Additional information relevant to DME and DME's market participants will be available to the Commission and its staff under the terms of certain information-sharing arrangements to which both the CFTC and the DFSA are parties. The arrangements include, without limitation, the *IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU)* dated October 16, 2003, the *Protocol Concerning Mutual Assistance, Information Sharing and Cooperation* signed by the CFTC and DFSA on December 1, 2005, and the *Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations*, as amended March 1998 (commonly known as the Boca Declaration). By letter dated February 13, 2007, the DFSA confirmed that the information-sharing arrangements would extend to information requested by the Commission in connection with the activities conducted pursuant to any no-action relief granted by the Commission, or any Division thereof, in connection with the placement in the U.S. of electronic facilities providing access to a DFSA-regulated market or products traded through a DFSA-regulated market.[63]

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[61] DME also has the power to suspend members and to terminate access to its facilities on the occurrence of specified default events.

[62] You represent that DME is currently seeking to sign the companion memorandum of understanding to the Boca Declaration, the Exchange *International Information Sharing Memorandum of Understanding and Agreement*, which provides for the sharing of information between market authorities upon the occurrence of certain triggering events, and that NYMEX, on behalf of DME, has initiated steps with the Inter Market Surveillance Group (ISG) for the DME to become a member of the ISG. Pursuant to the GSA, NYMEX has agreed to share all information relevant to DME trades with DME. DME may pass on any information it deems appropriate to the regulatory authorities for the purposes of prevention or detection of financial crime.

VII. CONCLUSION

Consistent with the Commission's Policy Statement and the June 2 Order, the Division has reviewed and considered DME's No-action request and the information and documentation forwarded to the Division in support thereof. Among other things, the materials furnished by DME indicate that DME and its Authorized members and guaranteed customers present in the DIFC are subject to oversight in the DIFC by a regulatory regime that is based upon regulatory objectives that generally are equivalent to those in the U.S.; that the regulatory regime provides basic protections for customers trading on DME's market and for the integrity of the market itself; that DME and its regulatory authority employ surveillance, compliance and enforcement mechanisms designed to ensure compliance with statutes and DME's and DFSA's rules and regulations; that DME adheres to the IOSCO Principles; and that adequate information-sharing arrangements applicable to the activities of DME are in place. The materials furnished by DME also indicate that its Recognized members are subject to oversight by a regulatory regime that is based upon regulatory objectives that generally are equivalent to those in the U.S. and that all members and guaranteed customers must comply with DME Rules and applicable DFSA Rules.[64]

Based specifically upon these and other representations made by DME in support of its No-action request, the Division has determined that granting no-action relief to DME and its members and guaranteed customers would not be contrary to the public interest. Accordingly, subject to compliance with the terms and conditions stated herein, the Division will not recommend that the Commission institute enforcement action against DME or its members or guaranteed customers if DME does not seek designation as a DCM or registration as a DTEF pursuant to Sections 5 and 5a, respectively, of the Act or comply with any other section of the Act or Commission regulations relating specifically to DCMs or DTEFs if: (1) DME members and guaranteed customers in the U.S. trade for their own accounts through direct access to DME Direct; (2) DME members and guaranteed customers who are registered with the CFTC as FCMs or who are Rule 30.10 Firms submit orders from or on behalf of U.S. customers for transmission through direct access to DME Direct; (3) DME members and guaranteed customers who are registered with the CFTC as CPOs or CTAs, or who are exempt from such CPO or CTA registration pursuant to Commission Regulation 4.13 or 4.14, submit orders on behalf of U.S. pools they operate or U.S. customer accounts for which they have discretionary authority, respectively, for transmission through direct access to DME Direct, provided that an FCM or Rule 30.10 Firm acts as clearing firm with respect to all activity conducted by such CPOs and

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[63] Letter from David Knott, Chief Executive, DFSA, to Reuben Jeffery III, Chairman, Commodity Futures Trading Commission (February 13, 2007).

[64] The Division notes that the foregoing is not intended to be an exhaustive list of the factors relevant to its decision to grant the no-action relief requested by DME nor of the factors that the Division might consider when analyzing no-action requests from other exchanges. No-action requests, by their nature, require case-by-case evaluation and the Division's conclusion regarding any particular no-action request will be based upon the facts and circumstances presented at the time of its review of that request.

CTAs through the submission of orders on DME Direct; and/or (4) DME members and guaranteed customers who are registered with the CFTC as FCMs or who are Rule 30.10 Firms accept orders for U.S. customers transmitted via AORS for submission to DME Direct.

The Division's no-action position shall become effective immediately with respect to the following DME contracts:

- Oman Sour Crude futures,
- West Texas Intermediate (WTI) - Oman Financial Spread futures, and
- Brent - Oman Financial Spread futures.

If additional futures and option contracts become available for trading through DME Direct, DME may make such futures and option contracts available for trading by direct access from the U.S. in accordance with the provisions of the Commission's Notice of Revision of Commission Policy Regarding the Listing of New Futures and Option Contracts by Foreign Boards of Trade that have Received Staff No-Action Relief to Provide Direct Access to their Automated Trading Systems from Locations in the United States.[65]

The scope of the Division's no-action position is restricted to providing relief from the requirement that DME obtain DCM designation or DTEF registration pursuant to Sections 5 and 5a, respectively, of the Act and regulatory requirements that flow specifically from the DCM designation and DTEF registration requirements if the above-referenced contracts are made available in the U.S. for trading through DME Direct in the manner set forth herein. The Division's no-action position does not extend to any other provision of the Act, any other Commission regulations or orders, or to any registered futures association rules and does not excuse DME or its members from compliance with any applicable requirements thereunder. Nor does the no-action position alter, restrict, or expand the coverage of existing Commission exemptions for particular products.

The Division specifically notes that its no-action position does not alter the general requirement that a firm operating pursuant to the no-action relief provided herein must be appropriately registered or exempt from such registration to engage in the offer or sale of a foreign futures contract or a foreign option transaction for or on behalf of a U.S. customer. For example, nothing in this letter is intended to alter current Commission rules that require that any foreign firm that clears trades on a fully-disclosed basis on behalf of U.S. persons (including where the U.S. person is a non-clearing member of a foreign board of trade trading solely for its own account) be a registered FCM or a Rule 30.10 Firm.[66] However, if a foreign firm solely carries accounts on behalf of U.S. customers that are the foreign firm's or any registered FCM's proprietary accounts (as defined in Rule 1.3(y)) or the foreign firm is either a member of the relevant foreign board of trade or is a foreign affiliate of a registered FCM and its sole contact with a U.S. customer is that it carries the FCM's omnibus account, then the firm need not register under Rule 30.4 nor confirm relief under Rule 30.10.

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[65] 71 Fed. Reg. 19877 (April 18, 2006); corrected at 71 Fed. Reg. 21003 (April 24, 2006). The Notice of Revision does not apply to broad-based stock index futures and option contracts that are covered by Section 2(a)(1)(C) of the Act. Foreign boards of trade are required to seek and receive written supplemental no-action relief from Commission staff prior to offering or selling such contracts through U.S.-located trading systems.

[66] At this time, the Commission has not issued a Rule 30.10 order to DME permitting its members to conduct brokerage activities on behalf of U.S. persons without having to register as an FCM. However, DME members otherwise may qualify as a Rule 30.10 firm pursuant to other orders issued by the Commission pursuant to Rule 30.10. *See, e.g.*, 67 Fed. Reg. 30785 (May 8, 2002) (permitting firms authorized by Eurex Deutschland to solicit

Moreover, the Division's no-action position does not amend, revise, or negate the obligations of CPOs, CTAs, FCMs and Rule 30.10 Firms under the Act, Commission regulations, or Rule 30.10 orders. For example, Rule 30.10 Firms continue to be prohibited from maintaining a presence in the U.S. Thus, Rule 30.10 Firms cannot provide direct access to DME Direct in the U.S. (although they would be permitted to accept orders overseas from customers located in the U.S. that submit such orders by telephone or through an AORS located in the U.S.). FCMs or Rule 30.10 Firms who solicit or accept orders from U.S. customers for trading on DME Direct remain responsible for, among other things, complying with risk disclosure, the handling and allocating of customer orders, and the segregation of customer funds.

The Division's no-action position does not affect the Commission's ability to bring appropriate action for fraud or manipulation. The Division specifically notes that the use of AORSs to transmit orders to DME Direct shall be subject to all existing Commission rules and regulations and to any future rules or guidance issued by the Commission or the Division. Finally, this letter does not address issues that might arise under the Securities Act of 1933, the Securities Exchange Act of 1934, or any other applicable federal securities law or rule promulgated thereunder.

The Division's no-action position is subject to compliance with the following conditions:

1. DME will, at all times, continue to satisfy the criteria for designation as an AMI under the applicable laws of the DIFC with respect to the transactions effected through DME Direct.

2. The DIFC laws, systems, rules, and compliance mechanisms applicable to DME will continue to require DME to maintain fair and orderly markets; prohibit fraud, abuse, and market manipulation; and provide that such requirements are subject to the oversight of the DFSA.

3. DME will continue to adhere to the IOSCO Principles for the Oversight of Screen-Based Trading Systems for Derivatives Products, as updated, revised, or otherwise amended to the extent consistent with U.S. and DIFC law.

4. Members and guaranteed customers will only have direct access (*i.e.*, not through an AORS) to DME Direct from the U.S. if a clearing member guarantees and assumes all financial responsibility for all activity conducted through the members' or guaranteed customers' direct access connection to DME Direct. DME will not provide, and will take reasonable steps to prevent third parties from providing, such access to DME Direct to persons other than DME

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and accept orders from U.S. persons for otherwise permitted transactions on all non-U.S. exchanges where such members are authorized to conduct business on behalf of customers pursuant to German law).

members and guaranteed customers that are guaranteed by a clearing member.[67]

5. All orders that are transmitted through DME Direct by a DME member or guaranteed customer that is operating pursuant to the no-action relief provided herein will be solely for the member's or guaranteed customer's own account unless (i) such member or guaranteed customer is registered with the CFTC as an FCM or is a Rule 30.10 Firm, or (ii) such member or guaranteed customer is registered with the CFTC as a CPO or CTA, or is exempt from such registration pursuant to Commission Regulation 4.13 or 4.14, provided that an FCM or Rule 30.10 Firm acts as clearing firm with respect to all activity conducted by such CPO or CTA through the submission of orders on DME Direct.

6. All orders for U.S. customers accepted through an AORS and transmitted by a member or guaranteed customer through DME Direct will be intermediated by a member that is either registered with the Commission as an FCM or is a Rule 30.10 Firm and all U.S. customers must qualify as Clients under DFSA COB Rule 3.2.

7. Prior to operating pursuant to the no-action relief provided herein, DME will require each current and prospective member that is not registered with the Commission as an FCM, a CTA or a CPO to execute and file with DME a written representation, executed by a person with the authority to bind the member, stating that as long as the member operates pursuant to the no-action relief provided herein, the member agrees to and submits to the jurisdiction of the Commission with respect to activities conducted pursuant to the no-action relief. DME will maintain the foregoing representations as long as the relevant member is operating pursuant to the no-action relief and shall make such representation available to the Commission upon the request of a Commission representative.

8. Prior to their operating pursuant to the no-action relief provided herein, DME will require each current and prospective member that is not registered with the CFTC as an FCM, a CTA or a CPO to execute and file with DME a valid and binding appointment of a U.S. agent for service of process in the U.S. pursuant to which the agent is authorized to accept delivery and service of "communications" issued by or on behalf of the Commission.[68] DME will maintain the foregoing appointments as long as the relevant member is operating pursuant to the no-action relief and shall make such appointments available to the Commission upon the request of a Commission representative.

9. Prior to their operating pursuant to the no-action relief provided herein, DME will require each current and prospective member that is not registered with the CFTC as an FCM, a CTA or a CPO to file with DME a written representation, executed by a person with the authority to bind the member, stating that as long as the member operates pursuant to the no-action relief provided

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[67] Members include those persons identified in footnote 3 for the purposes of this no-action letter and the conditions imposed upon the relief provided herein.

[68] For purposes of these conditions, "communications" is defined to include any summons, complaint, order, subpoena, request for information, or notice or any other written or electronic documentation or correspondence issued by or on behalf of the Commission.

herein, the member will provide, upon the request of the Commission, the U.S. Department of Justice and, if appropriate, the National Futures Association (NFA), prompt access to original books and records maintained at their United States offices as well as to the premises where DME Direct is installed or used in the U.S. DME will maintain the foregoing representations as long as the relevant member is operating pursuant to the no-action relief and shall make such representations available to the Commission upon the request of a Commission representative.

10. Prior to operating pursuant to the no-action relief provided herein, DME will file with the Division, and maintain thereafter as long as DME, its members, or DME Direct operates pursuant to the no-action relief, a valid and binding appointment of a U.S. agent for service of process in the U.S., pursuant to which the agent is authorized to accept delivery or service of "communications", as defined above, that are issued by or on behalf of the Commission.

11. DME will maintain the following updated information and submit such information to the Division on at least a quarterly basis, and at any time promptly upon the request of a Commission representative, in the format reflected in the attachment to this letter:

a. For each contract available to be traded through DME Direct, (i) the total trade volume originating from electronic trading devices providing access to DME Direct in the U.S., (ii) the total trade volume for such products traded through DME Direct worldwide, and (iii) the total trade volume for such products traded on DME generally; and

b. A listing of the names, NFA ID numbers (if applicable), and main business addresses in the U.S. of all DME members that have access to DME Direct in the U.S.

12. DME will request that the DFSA provide to the Division not later than July 1st of each year a letter or email confirming that DME retains its authorization in good standing as an AMI under the applicable laws of the DIFC or other exchange licensing methodology used in the UAE.

13. DME will promptly provide the Division with written notice of the following:

a. Any material change in the information provided in its No-action request, including any information contained in the documents submitted in support thereof;[69]

b. Any material change in DME's Rules or the laws, rules, and regulations in the DIFC relevant to futures and options;

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[69] The Division notes that "material" changes in the information provided to it in support of DME's No-action request would include, without limitation, a modification of: DME's membership criteria; the location of DME's management, personnel or operations (particularly changes that may suggest an increased nexus between DME's activities and the U.S.); the basic structure, nature, or operation of DME Direct; or the regulatory or self-regulatory structure applicable to DME members.

c. Any matter known to DME or its representatives that, in DME's judgment, may affect the financial or operational viability of DME, including, but not limited to, any significant system failure or interruption;

d. Any default, insolvency, or bankruptcy of any DME member or guaranteed customer known to DME or its representatives that may have a material, adverse impact upon the condition of DME, the Clearing House, or upon any U.S. customer or firm;

e. Any known violation by DME or any DME member or guaranteed customer of the terms or conditions of the no-action relief provided herein; and

f. Any disciplinary action taken by DME against any DME member or guaranteed customer operating pursuant to the no-action relief provided herein that involves any market manipulation, fraud, deceit, conversion or that results in suspension or expulsion and that involves the use of DME Direct to submit orders to DME and either (1) the DME member or guaranteed customer against whom the disciplinary action is taken is located or based in the U.S. or (2) the disciplinary action results, in whole or in part, from conduct that: (i) involves the use of DME Direct; (ii) involves a U.S. customer or firm or registered FCM; or (iii) might have a material, adverse impact upon any U.S. customer or firm.

14. A clearing member authorizing a guaranteed customer direct access to DME Direct must assist the DME in a timely manner in any investigation into potential violations of DME Rules, the Act, or the terms or conditions set forth in the no-action relief provided herein, including, but not limited to, requiring the guaranteed customer to provide documents and answer questions from the DME and/or to appear in connection with the investigation.

15. A clearing member authorizing a guaranteed customer direct access to DME Direct will suspend or terminate the guaranteed customer's direct access if DME determines that the actions of the guaranteed customer threaten the integrity or liquidity of any contract, violate any DME Rules, the Act, or the terms and conditions set forth in the no-action relief herein, or if the guaranteed customer fails to cooperate in an investigation.

16. Information-sharing arrangements satisfactory to the CFTC will be in effect between the Commission and the DFSA.

17. The Commission will be able to obtain sufficient information regarding DME and its members and guaranteed customers operating pursuant to the no-action relief provided herein. DME will provide directly to the Commission information necessary to evaluate the continued eligibility of DME or its members or guaranteed customers for the relief, to enforce compliance with the terms and conditions of the relief, or to enable the Commission to carry out its duties under the Act and Commission regulations and to provide adequate protection to the public or U.S. DCMs and DTEFs.

18. DME will employ reasonable procedures, to be determined by DME, for monitoring and

enforcing compliance with the terms and conditions of the no-action relief provided herein.

The no-action position taken herein is taken by the Division only and does not necessarily reflect the views of the Commission or any other unit or member of the Commission's staff. It is based upon the information and representations contained in DME's No-action request and the materials submitted in support thereof. Any materially different, changed, or omitted facts or circumstances may render this letter void. The Division specifically notes that it will examine the volume information submitted as a condition to the no-action relief provided herein as well as any changes in the nature or extent of DME's activities in the U.S. to ascertain whether DME's presence in the United States has increased to a level that might warrant reconsideration of the no-action relief. Finally, as with all no-action letters, the Division retains the authority to condition further, modify, suspend, terminate, or otherwise restrict the terms of the no-action relief provided herein, in its discretion.

If you have any questions regarding this correspondence, please contact Duane C. Andresen, Special Counsel, at dandresen@cftc.gov or by phone at (202) 418-5492.

Very truly yours,

Richard A. Shilts
Director

cc: Gregory C. Prusik, Vice-President Compliance and Registration, NFA
Branch Chief, Audit and Financial Review Unit, Division of Clearing and Intermediary Oversight, Chicago Regional Office

Attachment

Attachment

Quarterly Trading Volume Report for Foreign Boards of Trade Granted No-Action Relief

Product[1]	Volume From All Terminals[2]	Volume From U.S. Terminals[3]	Percentage From U.S. Terminals[4]	Total Volume[5]
Contract 1				
Contract 2				
Contract 3				
Contract 4				
Totals				

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[1] List each contract that is eligible to be traded through U.S.-based electronic trading terminals, including those contracts for which there was no trading volume during the reporting period.

[2] Include the total electronic trading volume worldwide for each contract that is eligible to be traded through U.S.-based trading terminals and, in the bottom row, enter the combined total volume worldwide for all such contracts.

[3] Include the total electronic trading volume originating from electronic trading devices in the U.S. for each eligible contract and, in the bottom row, enter the combined total volume originating from the U.S. for all such contracts.

[4] For each contract, and for all contracts combined, divide the numbers in the Volume From U.S. Terminals column by the numbers in the Volume From All Terminals column and enter the percentage from U.S. terminals.

[5] Include the total electronic and non-electronic trading volume worldwide for each contract that is eligible to be traded through U.S.-based trading terminals, including any trading volume that is not generated by trading on the electronic trading system. Numbers should include, as applicable, volume originated by open outcry trading as well as volume generated through Basis Trading Facilities, Block Trading Facilities, Asset Allocation Facilities, Against Actuals Facilities, Guaranteed Cross Facilities, and other such facilities. In the bottom row, enter the combined total volume worldwide for all such contracts.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY

FOR THE
INFLATION-LINKED ASSET CLASS

February 19, 2008

This Policy is effective upon adoption and supersedes all previous policies on inflation-linked assets, commodities, inflation-linked bonds, infrastructure, and forestland (timber).

I. PURPOSE

The CalPERS Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), sets forth CalPERS' overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Inflation Linked Asset Class ("IL Asset Class" or "Program"). The design of this Policy ensures that investors, managers, consultants, and other participants selected by the California Public Employees' Retirement System ("CalPERS") take prudent and careful action while managing the Program. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with this Program.

The Program includes four components: commodities, inflation-linked bonds, infrastructure, and forestland. The Policy includes investment guidelines for the Program structure followed by an attachment for each component.

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

A. Prudently achieve long-term returns above inflation;

B. Diversify CalPERS investments; and

C. Hedge against inflation risks.

III. RESPONSIBILITIES

A. CalPERS' Investment Staff ("Staff") is responsible for the following:

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1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.

2. Reporting to the Committee quarterly or more frequently if needed about the performance of the Program.

3. Monitoring the implementation of, and compliance with, the Policy. Staff shall report material concerns and all Policy violations in a timely manner and in writing to the Committee. These reports shall include explanations of the violations and appropriate recommendations for corrective action.

The Asset Allocation unit will be responsible for the Program, though it may delegate investment management of Program assets to either external managers or other internal units.

B. The General Consultant ("Consultant") is responsible for:

Monitoring, evaluating, and reporting periodically to the Committee, on the performance of the Program relative to the benchmark and Policy.

C. For those programs that are managed by an External Manager ("Manager"), the Manager is responsible for all aspects of portfolio management as set forth in each Manager's contract with CalPERS and shall, at a minimum, fulfill the following duties:

1. Communicate with Staff as needed regarding investment strategy and investment results.

2. Monitor, analyze, and evaluate performance relative to the agreed upon benchmark.

3. Cooperate fully with CalPERS' Staff, Custodian, and consultant assigned to the Program concerning requests for information.

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IV. PERFORMANCE OBJECTIVE AND BENCHMARK

A. Benchmarks for the Program and for each of the four components are listed in Table 1 below:

Table 1. Program Benchmarks

Component	Benchmark Index
Commodities	GSCI-TR
Inflation-linked bonds	ILB Custom Index
Infrastructure	CPI + 5%
Forestland	CPI + 5%
Program (IL Asset Class)	CPI + 4%

GSCI-TR = S&P GSCI Total Return Index.
ILB Custom Index = 67% Lehman Total U.S. TIPS Index + 33% Custom Lehman Global Inflation Linked Bond Index ex TIPS, unhedged.
CPI = Prior month trailing 12-month U.S. Consumer Price Index, all urban consumers, not seasonally adjusted.

B. The performance objective is to outperform the Program benchmark, net of all fees, over rolling five-year periods.

V. INVESTMENT APPROACHES AND PARAMETERS

A. IL Asset Class Program Allocations

Program allocation targets and ranges are listed in Table 2 below. Allocations are expressed as a percentage of the market value of the CalPERS fund.

Table 2: Program Allocations

Component	Target*	Range*
Commodities	1.5%	0.50% - 3.00%
Inflation-linked bonds	1.0%	0.50% - 3.00%
Infrastructure	1.5%	0.00% – 3.00%
Forestland	1.0%	0.00% – 2.00%
IL Asset Class	5.0%	0.00% - 5.00%

* percentage of the CalPERS Fund.

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The allocation ranges in Table 2 will apply when the market value of Program assets equals or exceeds two percent of the CalPERS fund.

B. Prohibited Investments

Ineligible investments include the following:

1. Tobacco companies; and
2. Any investment prohibited by CalPERS' Insider Trading Policy or Restricted Company list.
3. Any other Committee-approved restriction

VI. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis as recorded by CalPERS' Custodian.

VII. GLOSSARY OF TERMS

Key words used in this policy are defined in CalPERS' Master Glossary of Terms.

Approved by the Policy Subcommittee: December 14, 2007
Adopted by the Investment Committee: February 19, 2008

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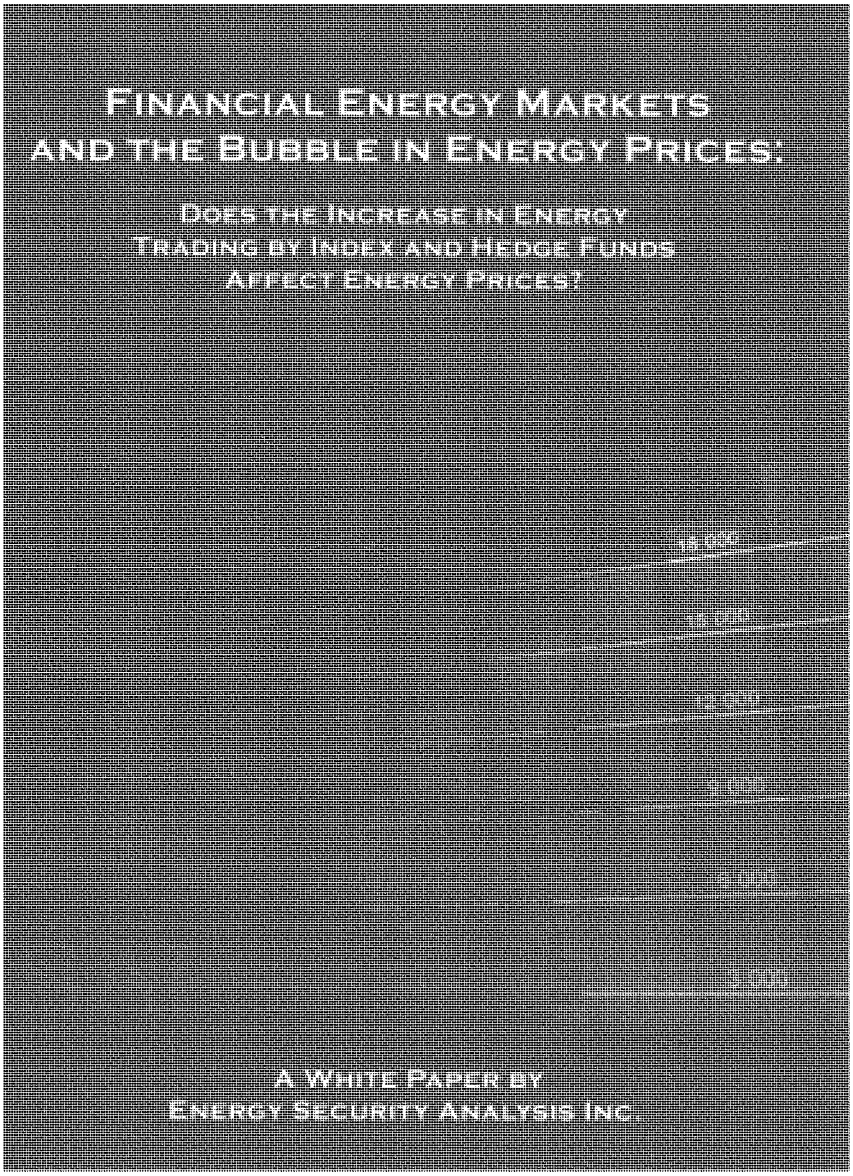

Financial Energy Markets and the Bubble in Energy Prices:

Does the Increase in Energy Trading by Index and Hedge Funds Affect Energy Prices?

A White Paper by
Energy Security Analysis Inc.

Financial Energy Markets and the Bubble in Energy Prices:

Does the Increase in Energy Trading by Index and Hedge Funds Affect Energy Prices?

An ESAI White Paper

March 2007

ABOUT THE FINANCIAL ENERGY MARKETS REPORT

The increase in world oil prices to almost $80 per barrel in 2006 – occurring at the same time that immense flows of capital poured into commodities, and hundreds of new financial institutions (many of them Hedge Funds) got involved in energy trade – naturally led to concerns that these events were linked. Could oil prices have increased by as much if there were no financial oil markets?

Energy Security Analysis, Inc. (ESAI) has been involved in the systematic analysis of financial energy markets for more than a decade. Instead of taking a doctrinaire approach for or against the role of financial players – especially speculators – ESAI has always striven to identify the linkages between financial and physical energy markets with a practical, common-sense approach.

This White Paper is the result of such a practical assessment. We find that there are reasons to believe the financial markets have a distinct impact on energy prices, both on the level of prices and their volatility. But we also find that efficient energy markets – especially those that develop liquid forward market – have immense and global economic value. Rather than regulate financial market out of existence, the challenge to market participants is to develop a mature and practical understanding of the nexus between financial and physical energy markets.

ACKNOWLEDGEMENTS

The author is indebted to many scholars, businessmen and government officials who have helped develop a deeper understanding of this issue over the years. The intellectual atmosphere at ESAI has been highly conducive to this endeavor – nowhere in the world is there a better combination of detailed fundamental analysis of the world oil market with an open and practically appreciation of the wealth of information available from financial markets.

The author would like to thank Professor Robert J. Weiner for a decade of conversation on this issue, and, more recently, the Brattle Group's Garry Taylor and Peter Fox-Penner for their perspectives.

Finally, the author wishes to thank Mohammad Alipour-Jedi, Head of the Petroleum Market Analysis Department of the Organization of the Petroleum Exporting Countries. OPEC and the European Union sponsored a most interesting Symposium on this issue in December 2006, and my need to prepare for that outstanding event gave me a wonderful opportunity to revisit this fascinating issue.

Edward N. Krapels

March 2007

ABOUT ESAI

Energy Security Analysis, Inc. (ESAI) is a Boston-based consultancy specializing in, among other things, the systematic analysis of international oil markets. In the 1980s, ESAI developed a unique proprietary database on world oil inventories and used this understanding to develop a series of market evaluations using the principle of Stockwatch as its central analytical device. This has served us well – it is still critically important for market participants to develop a comprehensive and sophisticated understanding of world oil supply and demand fundamentals, and of the flows into and out of stocks that are often the only observable evidence of these fundamentals.

In the early 1990s, ESAI became aware that there was a new set of fundamentals shaping oil (and later, natural gas) prices – the flows of funds into and out of financial energy markets. We established a systematic method for tracking these flows – called it, naturally, Fundwatch – and have maintained for more than a decade that the overall price of oil in both spot and forward markets can only be understood by an integrated analysis of physical and financial energy markets.

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Table of Contents

PART I: THE FLOW OF FUNDS 6

- ***The Flow of Funds in Financial Markets*** *8*
  - *Thousands of Streams* *11*
  - *The Flow of Funds into Commodities* *12*
  - *The Flow of Funds into Energy* *13*
  - *A Framework for Analysis* *14*
- ***Developments In The Financial Oil Markets Since Launch Of The NYMEX Contract*** *15*
  - *The Foundation: The Forward Curve* *16*
  - *The Rise of ICE* *17*
  - *Investment Banks, Hedge Funds and Other Organized Speculators* *20*
- ***The Current State Of Financial Oil And Gas Markets*** *23*
  - *Volume and Open Interest on All Futures Exchanges* *23*

PART II: THE EFFECTS OF FINANCIAL MARKETS ON ENERGY PRICES 27

- ***The Issue: Are Oil and Gas Prices a Bubble?*** *27*
  - *Concerns About the Impact of Financial Markets* *30*
  - *Trading Entities and Their Trading Styles* *32*
- ***Analysis of The Effects of Financial Markets on Oil and Gas Prices*** *34*
  - *Some Illustrative Analyses of Financial Market Effects on Oil Prices* *36*
  - *Potential Hypotheses for Further Evaluation* *40*
  - *Fallibility of "the Funds"* *40*
  - *Implications For Capital Market Transactions* *42*
- ***Regulatory Implications*** *44*

PART I: THE FLOW OF FUNDS

This paper is an exploration into the question of whether financial energy markets affect both the level and the volatility of oil and gas prices. We use the term "financial energy markets" here to mean the collective of trading arenas in which forward energy prices evolve from trades on (1) formal traditional exchanges (notably the New York Mercantile Exchange), (2) new forms of exchanges that combine traditional and over-the-counter transactions (notably, the Intercontinental Exchange), and (3) bilateral energy contracts whose prices are indexed to those of the exchanges.

Discussions within the oil and finance community reflect various perspectives on this issue. The discussions raise a very important question: did the increase in oil prices above $50/barrel and natural gas prices above $10 per MMBTU in 2006 reflect classic commodity "bubbles" in which financial markets played a distinct, *sui generis* role[1]; or a "new regime" of permanently higher prices brought about by sharp increases in demand and enduring changes in supply, which pushed both crude oil and natural gas into suddenly much higher marginal production costs? As always, the answers are not mutually exclusive. We may also have lived through a period when there was a "perfect storm" of conditions conducive to higher prices.

This is obviously an enormously complicated question. The number of dollars involved in energy futures and over the counter markets (collectively, the energy derivatives markets) is measured in the hundreds of billions. The physical oil market is global in scale, and information about global oil stocks and flows is notoriously incomplete. The flow of investor funds into commodities; into the fuels segment of commodities; into individual fuels; and from the long to the short side of particular markets is also immense and has been growing rapidly in the last five years.

The question we explore in these pages is whether the increase in the volume and open interest in oil and gas derivatives markets has a significant impact on world crude oil and petroleum product prices, and on U.S. natural gas prices.[2] We admit from the onset of this exploration that I believe this is likely to be one of those questions that – to use Gregory Treverton's useful distinction[3] -- is a mystery, rather than merely a puzzle. In their formal capacities, economists are trained to treat problems as puzzles, amenable to rational analysis. That requires enough information to move the problem from the mists of mystery to the brighter lights of puzzles. There are reasons to believe that such condition do not exist, yet, in this case.

---

[1] We use sui generis here in its legal context: as a unique, distinct, or one-of-a-kind effect.

[2] ESAI first called attention to the apparently growing influence of financial markets in a memo we sent to our clients in 1994, which was subsequently published as an article in Energy Risk (November 1994). Subsequent elaborations on our argument have appeared in memos to our clients as well as in later issues of Energy Risk and in Managed Derivatives (August 1996).

[3] Gregory Treverton, "Intelligence – A Funhouse of Reflections," Commentary on the website of the Rand Corporation; http://www.rand.org/commentary/0216SFC.html (January 17, 2007.

Put yet another way, this paper provides a review of the question: how do financial energy market activities influence energy prices? In earlier articles on this issue[4], we have compared the "flow of funds" of the magnitude we will describe in this Paper to a new wave of buyers and sellers interested in oil and gas. Could that flow have created a "bubble" in oil and gas prices in 2005? Examples of such bubbles abound, from Dutch tulip markets in the 1600s to Internet equities in the 2000s, asset classes routinely go through booms and busts created – not by any change in the costs of production or technological change in the value added by consumption – but purely by virtue of a change in the desire to own the asset.

As Robert Weiner has shown, there were forward and derivative instruments in oil markets as far back as the 1860s, hut they were not as ubiquitous and as easy to use as those available today.[5] Before the advent of modern financial markets, the desire to own oil could manifest itself in only limited ways. One could hoard physical barrels of oil, put them in storage, and sell them at a later date (at a profit or a loss). Or, one could buy the equity or debt instruments of oil producing companies or purchase oil-bearing lands.

Beginning in the 1980s, the emergence of a viable and liquid futures market for oil made it much easier for investors and traders to deal in the commodity: they could buy or sell contracts, settled by an Exchange. U.S. natural gas followed suit in the early 1990s. Like any other futures market, the oil and gas futures markets allow one class of participants to hedge, and another class of participants to speculate. Speculators play an important role: they allow hedgers to put the risk of commodity price fluctuations to other actors better able or more willing to live with them. Oil and gas producers and consumers are hedgers, small traders and larger financial institutions, like hedge and private equity funds, some investment banks, and specialized energy trading outfits, are speculators.

Even though many crude oil and natural gas producers, oil refiners, and petroleum product and natural gas consumers do not hedge, the fact remains that New York Mercantile Exchange (NYMEX)-traded West Texas Intermediate (WTI) crude oil and Intercontinental Exchange (ICE) –traded Brent crude oil, American and European heating oil and gasoline, and U.S. natural gas contracts have become benchmarks of both physical commodities and financial assets whose price fluctuations affect the economics of the entire energy industry as well as those buying services from that industry. Thus, even purely commercial participants in oil and gas markets are just as affected by the force of financial energy markets as are the speculators and hedgers that use them every day.[6]

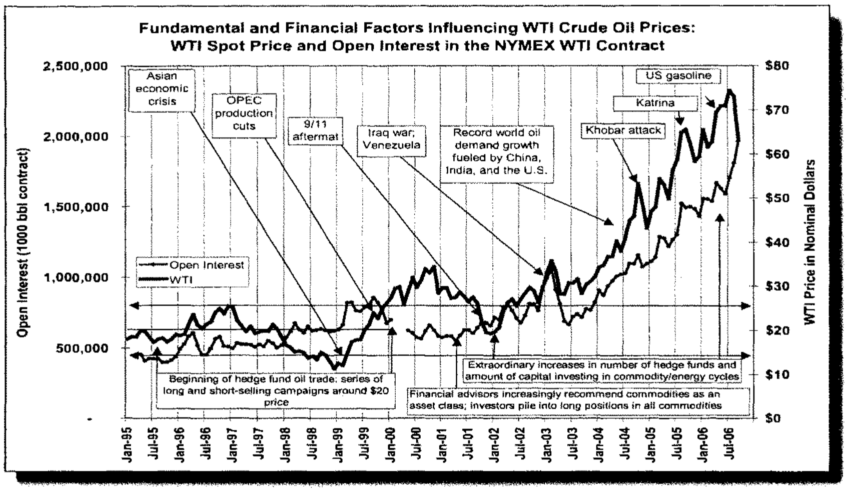
The chart below presents a summary picture of the scope of the increased use of crude oil futures contracts, and visually relates that increase to the price of oil. The chart shows the variety of fundamental economic and political events during the 1995 – 2006 period that affected the oil markets. Some, such as the Asian economic crisis, led to decreases in oil demand and in oil prices. Others led to decreases in oil supply and put upward pressure on oil prices. In the typical market environment, such changes led to crude oil price fluctuations in a range (not adjusted for inflation) between $15 and $25 per barrel.

---

[4] Edward N. Krapels, "Hunters or Hunted?" *Managed Derivatives*, May 1996, pp. 14-15.

[5] Rob Weiner, *Oil and Money: Coping with Price Risk Through Financial Markets* (with K. Dominquez & J. Strong), Harvard International Energy Studies 5, Cambridge: Harvard College, 1989

[6] A word about terminology here. As discussed later in this paper, the U.S. Commodities Futures Trading Commission (CFTC) has developed somewhat confusing commercial/non-commercial designations. For most purposes, this paper refers to speculators as those exposed to price variations, and they win or lose depending upon how price moves. Hedgers act to avoid price exposure, and if properly positioned, are indifferent to price movements up or down. Commercial players like producers can be speculators or hedgers, depending on the specifics of their activities in the financial markets.



Fundamental and Financial Factors Influencing WTI Crude Oil Prices: WTI Spot Price and Open Interest in the NYMEX WTI Contract

The equivalent natural gas chart is, from a geopolitical perspective, much simpler: there were no political crises affecting North American gas supply. Natural gas prices, nevertheless, increased notably and became more volatile at roughly the same time as a massive increase in the open interest in the natural gas futures contracts.

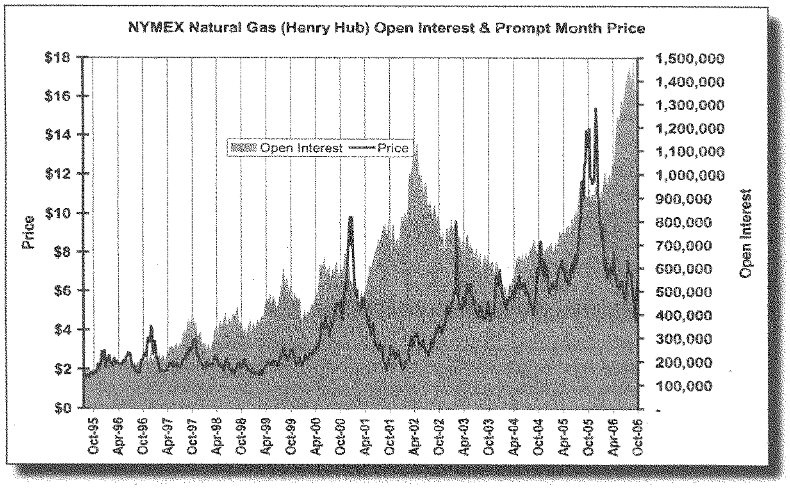
Beginning in the 1990s, some participants in oil and gas markets began to suspect that the trading behavior of institutional speculators was influencing prices. These speculative organizations had been minor participants in the financial oil markets since the crude oil contract was launched in 1984. By the mid-1990s, however, the number of financial investors trading crude oil contracts began to increase rapidly. The increase was not confined to oil: to the contrary, one can only understand the phenomenon, and how to deal with it, if one understands the larger investment picture in global financial markets.

The Flow of Funds in Financial Markets

In 1998, Malaysian Prime Minister Mahathir Muhammed blamed the collapse of Malaysia's economy at least in part on foreign currency speculators. In an interview with *Time* magazine, the Prime Minister complained that speculators' "ability to undermine the currency is such that we cannot do anything to help us recover.

Anything we do in the direction of recovery is seen as wrong and will cause a loss of confidence. And when they say we have lost their confidence, they then push the value of the currency and push down the value of the shares." Consequently, he took the bold gamble of decoupling Malaysia from international currency markets.[7]

There has always been a flow of money across borders. Today's flow of funds, however, appears to be growing exponentially, driven by the trade in financial instruments themselves: stocks, bonds, futures contracts, options, and derivatives. In most of these markets, the volume of trade is pumped up by the ability of traders to leverage their financial position: for example, in the oil futures market, an individual investor can take on a million dollar obligation with a margin payment of only $55,000.



NYMEX Natural Gas (Henry Hub) Open Interest & Prompt Month Price

With the wide array of contracts and assorted rules on leveraging trades, international financial markets have become extremely complicated. In every economy, wealth is held in the form of land, precious metals, goods, and financial instruments like stocks, bonds, currency holdings, and futures contracts. The stock of wealth, on a global scale, has to be tallied in the hundreds of trillions of dollars. The largest shares are in the United States, Japan, and Western Europe.[8]

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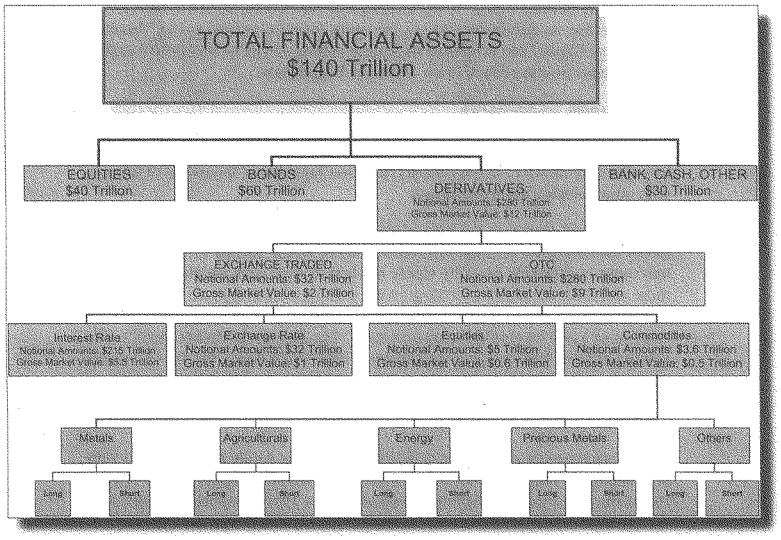
[7] Available on the World Wide Web at http://cgi.pathfinder.com/time/asia/magazine/1998/980615/malaysia_interview4.html

[8] For a valuable summary, see *International Capital Markets: Developments, Prospects, and Key Policy Issues*, International Monetary Fund, (a Staff Team led by Charles Adams, Donald J. Mathieson, Garry Schinasi, and Bankim Chadha). Available on the World Wide Web at http://www.imf.org/external/pubs/ft/icm/icm98/index.htm


TOTAL FINANCIAL ASSETS
$140 Trillion
EQUITIES
$40 Trillion
BONDS
$60 Trillion
DERIVATIVES
Notional Amounts: $290 Trillion
Gross Market Value: $12 Trillion
BANK, CASH, OTHER
$30 Trillion
EXCHANGE TRADED
Notional Amounts: $32 Trillion
Gross Market Value: $2 Trillion
OTC
Notional Amounts: $280 Trillion
Gross Market Value: $9 Trillion
Interest Rate
Notional Amounts: $216 Trillion
Gross Market Value: $5.5 Trillion
Exchange Rate
Notional Amounts: $32 Trillion
Gross Market Value: $1 Trillion
Equities
Notional Amounts: $5 Trillion
Gross Market Value: $0.6 Trillion
Commodities
Notional Amounts: $3.6 Trillion
Gross Market Value: $0.5 Trillion
Metals
Agriculturals
Energy
Precious Metals
Others
Long
Short
Long
Short
Long
Short
Long
Short
Long
Short

If the stock of global wealth can be measured in the hundreds of trillions of dollars, the flow of funds – which no single institution measures systematically – amounts to several trillions of dollars over the course of a year. Thus, a Japanese investor may sell his real estate in Tokyo in order to buy stocks in Malaysia, or U.S. Treasury Bills, or crude oil futures contracts, or a trunkful of gold or silver. He may also deposit his funds in a bank, which then makes loans, engages in swaps, and sells futures and options in the over the counter markets.

This intricate web of investments, loans, and derivatives has grown substantially over the last ten years. Parts of this web are always under some pressure. There is almost always a small meltdown or bubble somewhere. In 1998 and 1999, the meltdowns were very large indeed. Asian equity, real estate, and currency markets collapsed. In 2001, the meltdown occurred in U.S. and global equity markets in the spring of 2000. In 2006, the flow retreated from U.S. real estate.

Meltdowns can happen anywhere. In late September 1998, reports began to circulate of a successful effort by the New York Federal Reserve Bank to orchestrate a $3.5 billion bailout of a hedge fund (Long Term Capital). According to news reports, "Wall Street's biggest power brokers agreed to prop up one of their most aggressive offspring, Long-Term Capital Management, L.P., a highflying hedge fund that was on the verge of collapse."[9] According to the *Wall Street Journal,* one of the "hotly debated topics" in the meeting that reached the accord to bail out the Fund was that its failure "would put the entire financial system at risk" because Long Term Capital had leveraged its several billion dollars of investment capital into a market position that at times exceeded $100 billion.

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[9] "A Hedge Fund Falters, and Big Banks Agree to Ante Up $3.5 billion," *Wall Street Journal,* September 24, 1998, p. A-1.

Thousands of Streams

The international flow of funds – sketched out in the flowchart above -- is in no way centrally directed; to the contrary, it is best regarded as thousands of streams with ultra-complex interconnections

The largest stream in the flow of funds is in *equity investments,* whose total, global capitalization in stock markets amounted to $37 trillion in 2006[10]. Investors eager to diversify from the equity markets in their own country are placing more and more money in an ever-growing number of international equity funds. These funds give the investor a wide array of choices of geographic risk ("The Asia Fund") and level-of-development risk ("The Emerging Market Fund"). The volume of cross-border equity investment is hard to pin down. For the G-7 countries, gross foreign direct investment has increased from $14 billion in 1970 to $729 billion in 2001; cross-border portfolio investment grew from $5 billion in 1970 to $12.5 trillion by 2001.[11]

Not surprisingly, developing countries look at these equity capital inflows with both dread and longing. Many welcome the investment that capital inflows enable. But as the Asian stock market meltdown of the late 1990s showed, the outflow of foreign capital can bring economic growth to a screeching halt. Such an outflow hit the economies of Southeast Asia particularly hard in late 1997. Thailand, Malaysia, the Philippines, Indonesia and even Singapore had achieved high rates of economic growth because they had invited in foreign capital. When that capital fled, the disinvestment effects were powerful: the decline in foreign demand for southeast Asian stocks ultimately sent Asian GDP growth figures from the black into the red.

A second large stream in the flow of funds is investment in *bond markets*, now with $60 trillion in outstanding issues[12]. Over the past few decades, a number of changes have facilitated the growth of international bond trading. Japan's massive trade surpluses required placement of hundreds of billions of dollars in the deepest of the bond markets – U.S. Treasuries. The consolidation of the European financial affairs led to tremendous growth in the Euro-dollar denominated bond market.

As with the case of equities, the magnitude of the flow of funds into bonds is a matter of the gravest concern. For almost a decade, the U.S. Treasury Department dreaded the prospect of a sudden liquidation of first, Japan's, and more recently, China's positions in U.S. government bonds. Such a liquidation, in turn, would be a decision that could only be made by Japan or China's head of state. We suspect that most investors intuitively understand that a sudden change in the flow will affect the relative prices of the bonds being traded. Thus, a selloff by Japan of U.S. Treasuries would put downward prices on U.S. bond rates, quite apart from any change in the underlying intrinsic value of U.S. government bonds.

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[10] International Monetary Fund, *Global Financial Stability Report,* Washington, DC, 2006, p. 95 (hereafter, IMF GFSR).

[11] IMF, Press Release: "IMF Publishes 2001 Global Portfolio Investment Survey," obtained at www.imf.org/external/np/sec/pr/2003/pr0317.htm.

[12] IMF GFSR, p. 95.

The Flow of Funds into Commodities

When assets that are traded in this matter are subject to U.S.-organized futures market rules, an extremely valuable source of information becomes available which describes the movement of funds by hedgers and by speculators. This is the "Commitment of Traders Report" (COT) of the U.S. Commodities Future Trading Commission. The COT reports are issued every week, and they reveal the long and short positions of large traders in all U.S. futures markets.

The chart below presents a timeline of the total open interest (the futures contracts outstanding at a particular point in time) in the various U.S. futures markets, which we have divided into four groups: finance, metals, agriculture, and energy. The chart presents the simplest possible picture: the total open interest of all of the contracts in each of these classes. The chart clearly shows a very large increase in open interest in the early part of this decade in all of the asset classes.

Judged by their price behavior only, commodities as an asset class have had "bull runs" (periods of rising prices) and "bear runs" (periods of falling prices). There was a long bull run in the late 1970s, another in 1983-84, 1987-88, and 1994-95. None of these, however, can compare with the length and the size of the bull run that began in 2001 and began to end only in 2006.

The increase in the interest in trading commodities in the 2000's stemmed from two different investor groups: institutional investors interested primarily in adding a modest amount of commodity exposure to portfolios of financial assets, and funds (of which hedge funds have attracted the most attention) actively trading commodities for short-term speculative gains. The former group constituted a "buy and hold" cohort who typically added to oil *demand* (i.e., biased towards the long side of commodity transactions); the latter were as comfortable on the short side as on the long side, and tended to favor shorter-term trading strategies.

On the institutional investor front, the *Wall Street Journal* reported on September 9, 2004, that "Market analysts conservatively figure that roughly 150 institutions have so-called passive investments pegged to the Goldman Sachs Commodity Index, up from fewer than 50 in 2000. Goldman estimates that more than $25 billion is tied to the index, compared with $8 billion four years ago. American International Group Inc. estimates that an additional $8 billion to $10 billion in investments is pegged to the Dow Jones-AIG Commodity Index, up from about $200 million a few years ago."[13]

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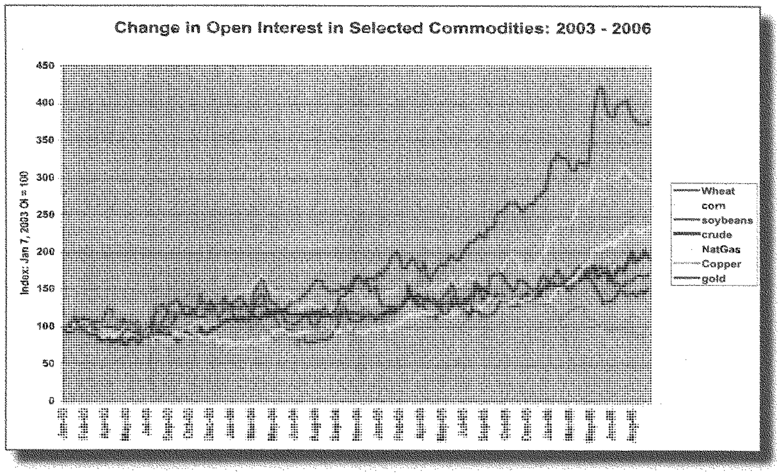
[13] Michael R. Sesit, "Commodities Enter Investment Mainstream," *Wall Street Journal,* September 9, 2004. The same article reported that "Commodities' status as an acceptable investment for mainstream institutions could get a further boost from a recently published paper: "Facts and Fantasies about Commodity Futures" by Gary Gorton of the University of Pennsylvania's Wharton School and K. Geert Rouwenhorst of the Yale School of Management at Yale University. The two academics conclude that during the past 45 years, commodity futures have had roughly the same return as stocks with less risk, have way outperformed bonds and are a better hedge against inflation than either stocks or bonds."

On the hedge fund front, there is little disagreement that the role of these funds in all of the futures markets has grown exponentially over the past ten years. Patrick Parkinson, Deputy Director of Research and Statistics of the U.S. Federal Reserve Board, has noted that "although the role of hedge funds in the capital markets cannot be precisely quantified, the growing importance of that role is clear. Total assets under management are usually reported to exceed $1 trillion. Furthermore, hedge funds can leverage those assets through borrowing money and through their use of derivatives, short positions, and structured securities. Their market impact is further magnified by the extremely active trading of some hedge funds. The trading volumes of these funds reportedly account for significant shares of total trading volumes in some segments of fixed income, equity, and derivatives markets."[14]

As is readily apparent in the chart on page 9, institutional and hedge fund capital is flowing into all sorts of futures markets, from agriculture to financial instruments to metals to energy.

The Flow of Funds into Energy

Commodity markets have been ideal spawning grounds for the development of futures markets. There is a certain irony in the fact that commodity futures markets, which have a reputation for rowdiness, are in fact highly organized and regulated entities. Be that as it may, once a successful futures market for commodities is up and running, it becomes the nexus of price discovery for that commodity.



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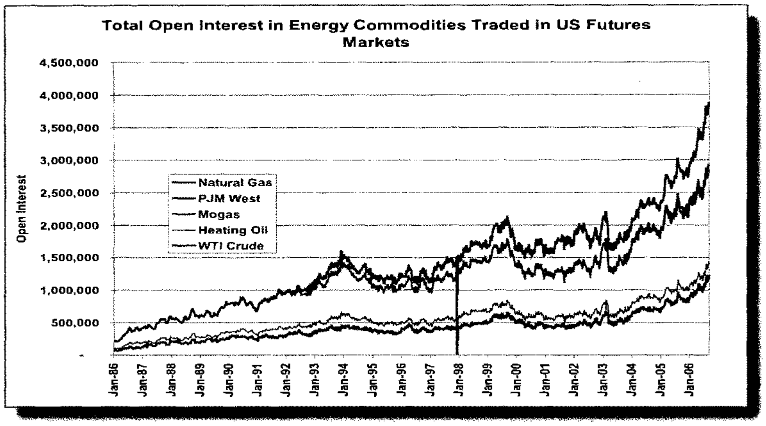
[14] "The Role of Hedge Funds in the Capital Markets," Testimony of Patrick M. Parkinson, Deputy Director, Division of Research and Statistics Before the Subcommittee on Securities and Investment, Committee on Banking, Housing, and Urban Affairs, U.S. Senate, May 16, 2006.



For example, in 1984, the New York Mercantile Exchange (NYMEX) introduced a contract to trade West Texas Intermediate (WTI) crude oil. Had NYMEX launched the WTI contract in the 1970s, when the members of the Organization of Petroleum Exporting Countries were running a fairly effective oil cartel, and most oil-importing countries were still regulating their internal oil markets, the contract would have failed. But NYMEX was both skillful and lucky to introduce the contract three years after the United States and Britain totally deregulated their oil markets and one year before OPEC's effective oligopoly collapsed.

Trading in WTI, and in its first cousin, the London-traded Brent crude oil contract, rapidly gained volume and open interest. As financial contracts, WTI and Brent provide investors with convenient and highly liquid markets in which to trade instruments tied to crude oil. Before this process of commoditization of oil took place, only insiders (professional traders, oil companies, and a few investment banks) could, as a practical matter, participate because trading involved multimillion dollar cargoes of oil. After NYMEX introduced the WTI contract, anyone with some margin money in the bank could take a bet on oil prices.

A Framework for Analysis

In the physical oil and gas markets, prices are set by the supply and demand for the physical commodity. Given a set of competitive supply and demand conditions, as demand rises, all other things held constant, prices tend to rise; if supply rises, prices tend to fall, and so on. Exactly the same framework should be used to analyze financial energy markets. If we think for the time being of an oil or gas financial contract as an asset in its own right, it stands to reason that an increase in demand for this asset (which in futures parlance would be called an increase in interest in taking "long" positions) would, all other things held constant, require an increase in prices to attract an offsetting number of sellers (those interested in taking short positions) into the market.

Changes in the demand and supply for any financial asset affect the prices of those assets. In 2000, the United States was in the sixth year of a stock market boom characterized by huge inflows of funds into stocks. Many observers noted that the stock market had developed a classic, speculative "bubble," but that was very much a minority view until, beginning in 2001, there was a prolonged outflow of funds from the equities market. There followed a decline in the same stock prices that the inflows had sent zooming upwards.

It must be understood that investments in oil and gas contracts are often "incidental" parts of larger trades in commodities. It is not unusual for institutional investors and hedge funds to take large positions in the oil and gas market that were unrelated to oil and gas "fundamentals." The positions taken in oil and gas often have logic outside of whatever happened to be occurring in the oil and gas markets themselves[15]. That means that oil and gas markets really have two sets of "fundamentals:" those in the financial markets, and those in the physical markets.

Developments In The Financial Oil Markets Since Launch Of The NYMEX Contract

Commodity markets were first developed to trade agricultural products. Standardized contracts for the future delivery of a wheat crop the following summer allowed producers and consumers the ability to exchange an obligation to sell and buy a commodity that was not yet harvested. Standardized contracts not only increased liquidity, but because the Exchange was always the counter-party, credit costs and counterparty risks were lower than they were in many bilateral agreements.

Since the NYMEX first traded standardized energy products in the early 1980s, its WTI contract has remained the benchmark for all trades in crude oil. Even though over-the-counter (OTC) and other exchanges may trade larger volumes of WTI than the NYMEX, the price of WTI on the NYMEX remains the benchmark for the majority of crude oil trades in the financial markets.

In the OTC market, the standard Conoco Terms and Conditions for Dubai, the Brent contract, and other standardized instruments have greatly increased liquidity in trading those crude oils. However, these contracts have their own idiosyncrasies -- '5 0'Clocking', book-outs, tolerance-trading and other nuances eventually came to characterize these OTC instruments that were and are largely absent from WTI and Brent futures contracts.

In the late 1990s, with the emergence of the Internet as a ubiquitous presence in the corporate world, Enron Online introduced the idea of purely electronic trading. Using standardized contracts, Enron stood in as the counter-party to all deals until it crashed in 2001.[16]

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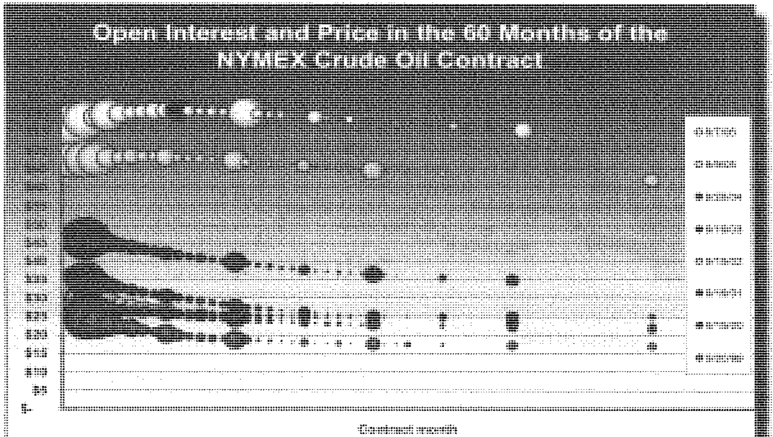
[15] See earlier discussion of the terminology of speculators, hedgers, commercials and other participants in the financial energy markets.

[16] Enron's model, because it was the counterparty to all of the trades, was called the "one-to-many" trading model. With Enron's demise, all of the electronic exchanges are "many-to-many" exchanges, meaning that the parties trade with each other rather than the operator of the exchange.

The Foundation: The Forward Curve

Without financial markets, it is extremely difficult to have a *forward curve* that reflects the price at which people are willing to buy and sell a commodity in the future. Where futures/forward markets do not exist, bilateral contracts can be executed whose payment terms are defined either in terms of spot prices or in terms of an anchor price plus adjustments, such as for inflation or exchange rate changes.

With financial markets for oil and gas, there are continuous indicators of the prices at which parties are willing to buy or sell in the future, and consequently there is great interest in the causes and effects of changes in the *structure* of prices in the forward curve, also known as *backwardation* and *contango*. The chart below presents the structure of prices in the WTI market on given trading days in August and September from 1999 to 2006. It also indicates the amount of open interest in each contract month, with nearby months having by far the greatest amount of open interest (and, by implication, depth and liquidity). In the more distant months (the so-called far dated part of the curve), liquidity diminishes and virtually disappears, except for a few key months (typically Decembers), where it appears traders appear to have clustered enough trades to establish a semblance of liquidity). Note that on the selected dates in 2000, 2001, 2002, 2003, and 2004, markets were in *backwardation*, whereas in 2005 and 2006, they were in *contango*[17].



On the consumer side, many large institutional and commercial oil and gas buyers hedge in "the middle part of the curve," largely for the purpose of managing

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[17] In *backwardation*, the forward months of the price curve are higher than the back months; in *contango*, the forward months of the price curve are lower than the back months. A 60 month price curve may have both backwardation and contango.

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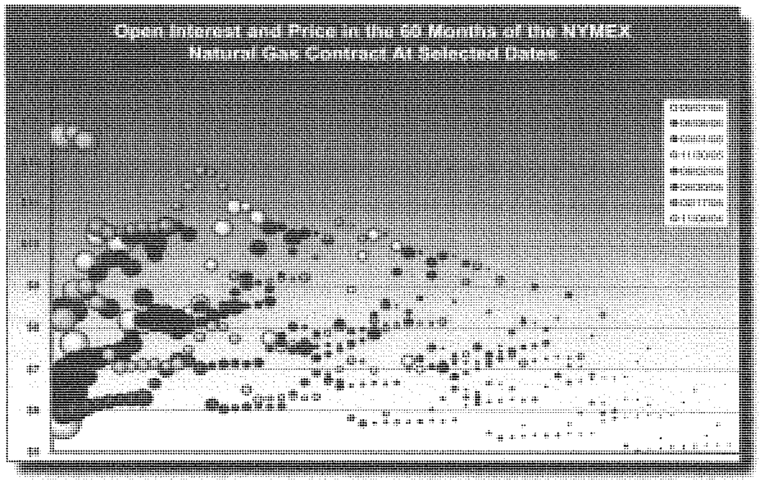
fuel budgets. For such consumers, prominently including airlines, hedging appears effective in periods of backwardation (when prompt prices are higher than forward prices), and ineffective in periods of contango (when prompt prices are lower than forward prices).

The chart below shows the challenge facing hedgers in the U.S. natural gas markets. Because gas demand is so strongly seasonal, prices exhibit market seasonal variations. In December of each year, there is likely to still be a substantial amount of peak seasonal consumption, hence the forward price curve usually exhibits a short period of contango, then a short period of backwardation, then a longer period of contango as the market anticipates the need to fill storage for the next winter season. This seasonal variability in the natural gas forward curve gives traders a large variety of trading opportunities, ranging from weather forecasts to storage economics to price support and resistance theories.



The Rise of ICE

In 2000, a half dozen investment banks and oil companies formed the Intercontinental Exchange ("ICE") for over-the-counter (OTC) electronic trading in energy and metals commodities.[18] The Atlanta based ICE is an electronic exchange open only to large commercial traders that meet the definition of an "eligible commercial entity" under the Commodity Exchange Act.[19] According to ICE, its market participants "must satisfy certain asset-holding and other criteria and included entities that, in connection with their business, incur risks relating to a particular commodity or have a demonstrable ability to make or take delivery of that commodity, as well as financial institutions that provide risk-management or hedging services to those entities."[20]

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[18] Energy Compass. *Market Forces: Big Oil increases market reach.* March 24, 2006. The founding partners of ICE are BP, Deutsche Bank AG, Goldman Sachs, Dean Witter, Royal Dutch/Shell Group, SG Investment Bank, and Total. In November 2005, ICE became a publicly traded corporation. Many of these original founders are major shareholders: Morgan Stanley owns nearly 15 percent of ICE shares, Goldman Sachs owns about 14 percent, Total owns about 9.5 percent, and BP owns about 9 percent.

Today, ICE operates the leading OTC electronic exchange for energy commodities in the world. ICE describes its participants as "some of the world's largest energy companies, financial institutions and other active contributors to trading volume in global commodity markets. They include oil and gas producers and refiners, power stations and utilities, chemical companies, transportation companies, banks, hedge funds and other energy industry participants."[21] According to ICE, its electronic markets now constitute "a significant global presence with over 9,300 active screens at over 1,000 OTC participant firms and over 440 futures participant firms as of December 31, 2005."[22]

In 2005, ICE purchased the International Petroleum Exchange (IPE), a London-based futures exchange, and established the "ICE Futures" market. ICE then swiftly converted the IPE's open-outcry pit trading system into an all-electronic exchange. Today, ICE operates two major electronic markets: ICE Futures and ICE OTC. ICE Futures is a futures market in London, regulated by the U.K. Financial Services Authority (FSA). ICE OTC operates as an "exempt commercial market" under section 2(h)(3) of the U.S. Commodity Exchange Act. Both markets operate outside of the CFTC's oversight.

Although ICE's OTC exchange does not operate its own clearinghouse, ICE has contracted with a third party, LCHClearnet, to offer clearing services for traders who want to trade only with other cleared traders. By trading only with other cleared traders, a party trading on ICE can minimize counterparty risk as if they were actually trading on a futures exchange, and thus avoid a significant disadvantage of traditional OTC trading.

The use of an OTC clearing service to reduce counterparty and credit risk has allowed more participants to become active in the OTC markets. Furthermore, clearing through a central clearinghouse typically reduces already low transaction costs of an OTC trade further while increasing the ability to cross-margin positions in other commodities.

ICE claims its "introduction of cleared OTC products has enabled us to attract significant liquidity in the OTC markets we operate."[23] Others agree, "[C]learing is paving the way for greater growth of the energy market as a whole," one futures industry publication reported. "Clearing not only helped restore liquidity post-Enron, it opened the door to an influx of hedge funds and other professional traders, many of whom come from the financial world." OTC clearing has also "created a new linkage" between the futures markets and the OTC markets. "On one level this is simple arbitrage between two sets of similar contracts. On another level it is a cross-fertilization of people and ideas, as each side seeks out better opportunities in newly accessible markets."[24]

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[19] Participation is restricted to parties that quality as an "eligible commercial entity" under Sec. 1a(1 1) of the CEA. Generally, these entities are large financial institutions, insurance companies, investment companies, corporations and individuals with significant assets, employee benefit plans, government agencies, and registered securities brokers and futures commission merchants.

[20] Intercontinental Exchange Inc, Form 10-K, March 10, 2006, p. 14.

[21] ICE 10-K, p. 14.

[22] ICE 10-K, p. 6.

[23] ICE 10-K, p. 5, 9

Number and Notional Value of Commodities Futures Contracts Traded in ICE Futures Markets

	2005		2004		2003	
	Number of contracts in thousands	**Notional value in billions**	**Number of contracts in thousands**	**Notional value in billions**	**Number of contracts in thousands**	**Notional value in billions**
IPE Brent Crude futures	30,412	$ 1,713	25,458	$ 955	24,013	$ 666
IPE Gas Oil futures	10,972	$ 569	9,356	$ 318	8,430	$ 208
IPE Natural Gas futures.......	444	$ 38	649	$ 34	815	$ 27

Number and Notional Value of Commodities OTC Commodities Contracts Traded in ICE Electronic Platform

	2005		2004		2003	
	Number of contracts in thousands	**Notional value in billions**	**Number of contracts in thousands**	**Notional value in billions**	**Number of contracts in thousands**	**Notional value in billions**
North American natural gas	55,524	$ 1,300	25,574	$ 388	13,703	$ 186
North American power	3,145	$ 165	1,683	$ 63	838	$ 27
Global oil	3,320	$ 102	3,580	$ 62	6,636	$ 71

Source: *Intercontinental Exchange 2005 Annual Report*, p. 6.

The table above presents a summary of the number and notional value of energy trades on ICE through 2005. In these three years, the two most notable successes were the trade in Brent futures (as a result of the IPE acquisition), and the trade in North American natural gas OTC volumes. By the end of 2005, the natural gas contract volume had swelled to more than 55 thousand contracts with a notional market value of $1.3 trillion.

In mid-January 2006, ICE notified the CFTC that it would begin trading West Texas Intermediate crude oil on its ICE Futures exchange in London on February 3, 2006. ICE also said that it would offer this contract for trading on its electronic trading devices operating in the United States. Under CFTC policy, ICE Futures needed only to provide prior notice to the CFTC to do this.[25] This marked the first time that futures contracts for crude oil produced in the United States were traded on an exchange located outside of the United States.

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[24] Acworth, Will. *The Tipping Point: OTC Energy Clearing Takes Off*, Futures Industry Magazine, January/February 2005.

[25] Notice of Statement of Commission Policy Regarding the Listing of New Futures and Options Contracts by Foreign Boards

Since ICE began trading WTI crude oil futures on its London exchange, it has steadily increased its share of the WTI crude oil futures market, although specific information on the relative market shares of ICE versus NYMEX is not readily available.[26] According to one energy trade publication, several large ICE stakeholders—BP, Total, and Morgan Stanley—were "doing their best to support the ICE WTI contract, with Goldman Sachs directing its traders to use the ICE platform rather than NYMEX."[27] ICE Futures continues to expand its reach into the U.S. energy commodities market as April 2006, saw ICE Futures begin trading futures in U.S. gasoline and home heating oil.

Because there are no reporting requirements for OTC trading, there are no publicly available quantitative measures of the extent of speculative trading in the OTC markets. OTC industry participants are not required to file large trader reports. What little information has been publicly disclosed, however, indicates there has been a substantial growth in speculative activity on the ICE OTC market. We will return to this issue later in this report.

Investment Banks, Hedge Funds and Other Organized Speculators

"Every act of production is a speculation in the relative value of money and the good produced."[28] Professional speculators, whether organized as hedge funds or on their own, lend liquidity to markets without which the markets would be much less efficient. Speculators naturally arise when risk that may formerly have been borne by a higher financial authority comes to affect the decisions of individual investors, corporations, and individuals. Speculation, in other words, thrives when

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of Trade that Have Received Staff No-Action Relief to Place Electronic Trading Devices in the United States, 65 Fed. Reg. 41641 (July 6, 2000).

[26] According to CFTC data, as of the end of April 2006, nearly 30 percent of WTI crude oil futures were traded on ICE Futures. Prior to the listing of a WTI contract on the ICE Futures exchange, ICE offered a WTI contract for trading on its OTC electronic exchange. In a recent interview, ICE Chairman and CEO Jeffrey Sprecher described how ICE's development of a successful OTC contract for WTI paved the way for the introduction of the WTI contract on ICE Futures: "To the outside world, we launched WTI and it came out with a very high adoption rate. But the reality is ICE was working on that contract for a year and a half prior to its launch. One unique thing about ICE is that we can take a product and launch it as a bilateral OTC contract allowing the energy trading community to trade it. While they trade it, we can work out many of the details, such as the size of the contract, delivery aspects, tick size and those things. Then we can add clearing to it and bring in more of the funds and speculators—if we get that going, then we can make it a futures contract. We went through with the WTI contract that process. It went from a bilateral swap to a cleared OTC contract to a futures contract. And we're bringing other contracts through that conveyor belt process. In the first half of this year, we're bringing clearing to 50 bilateral contracts that we already offered." From Futures & Options Week, "The market has spoken," April 24, 200 6. Quantitative data on the WTI contract traded on the ICE OTC electronic exchange is not readily available. According to former Federal Reserve Chairman Greenspan's recent testimony, during this period hedge funds and other institutional investors conducted a substantial amount of trading in crude oil in this market.

[27] *Energy Compass*, "Market Forces: Big Oil increases market reach," March 24, 2006.

[28] As quoted in Peter L. Bernstein, *Against the Gods: The Remarkable Story of Risk,* (New York: John Wiley & Sons, 1996, p. 305.

economies and markets are deregulated. Markets are deregulated, in turn, when political actors believe that market forces will contribute more to public welfare than government regulations.

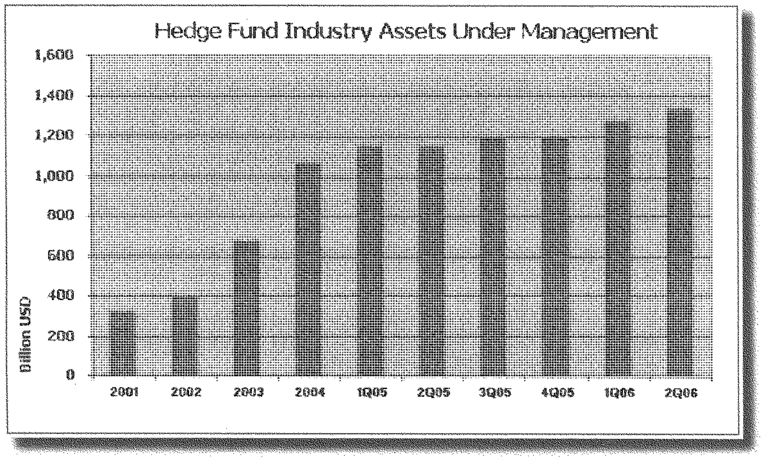
Deregulation of the US and British oil industries in the 1980s began a paradigm shift toward more open markets. However, this has been far from universal. While, oil regulations were gradually relaxed in most European countries, but to this day the internal markets of the majority of countries of Asia, Latin America, the Middle East, and Africa remain regulated. This comprehensive regulation of the internal oil market continued to be justified on the basis of "national security."

If deregulation does improve efficiency, it does so at the cost of a reduction in governmental control over prices. In its place is the market, and the market has two arenas: physical, and financial. In recent years, the financial markets have grown in volume and complexity.

In the world of commodity trading, the smart money is first of all in the investment banks of Wall Street, London, and a few other European financial centers. The strength of particular investment banks varies across commodities. In oil, Morgan Stanley and Goldman Sachs are particularly active. These investment banks develop over time a "book" in a particular commodity or financial asset, a compilation of long and short positions that the bank's own risk managers will constantly scrutinize for balance and for unwanted exposure.

The larger investment banks have over time built up "books of books" or portfolios of financial assets, and they will study the price correlations between these assets for balance or imbalance. For example, they may find that crude oil and soybean prices tend to statistically move together. A trader may want to exploit this analytical information for gains, but the risk manager may see overexposure to the two commodities together as a real problem. He will look for negative correlations, and seek to have books of assets that move up when crude oil and soybeans move down.

The development of these books by investment banks over the last decade is one of the most important developments in international finance. If the investment banks provide the channels of international commodity, currency, and other derivatives trade, hedge and private equity funds (hereafter referred to as "the Funds") provide much of the speculative money. The amount of speculator money in futures markets has increased dramatically in the last ten years. This increase reflects in part the torrent of investment capital that is increasingly free to move through financial markets, and it reflects in part the phenomenon of increased numbers of qualified fund managers and commodity trading advisors. Money management, after all, is one of the growth industries of the 1990s and 2000s. The general public is familiar with the "plain vanilla" funds – the mutual funds into which the bulk of pension savings goes. But mutual funds are only peripherally involved in the dynamics of commodities futures trading. Mutual fund managers confine their investments largely to the equity sector, where price changes are limited compared to the typical commodity price volatility.



The heart of speculative commodity and currency trading is in hedge funds and commodity pool operators who manage money – typically for wealthy clients or for institutions who have earmarked some of their funds for speculative purposes.[29] These managers are charged and paid to speculate intelligently in one or more markets where they believe they have the expertise to trade for profit.

In 1980, the amount of money under management by professionally-run managed futures and hedge funds was estimated to be only about $300 million. According to the publication *Managed Accounts Review,* it was still only about $1.4 billion by 1986. By 1990, however, the estimate was $8 billion, and by 1995, it became $22 billion. In the next ten years the assets under managed futures and hedge fund management exploded: by 2001 the number under hedge fund management had climbed to more than $300 billion, and by 2006 to more than $1.2 *trillion.* While most of that money was invested in the ultra-deep global equity and credit derivatives,[30] a growing amount of this total Flow of Funds has been diverted into energy commodities, and observers of these markets, as we will shortly discuss, believe their impact is likely to be substantial.

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[29] Hedge funds are misnamed: they are actually funds registered under special Securities and Exchange Commission rules. U.S.-based Commodity Trading Advisors (CTAs) and Commodity Pool Operators (CPOs) are registered with the Commodities Futures Trading Commission. In addition to U.S.-based funds, of course, there are hundreds if not thousands of off-shore funds operating under the regulations of their home countries or under no regulations at all.

[30] The *New York Times* reported on September 23, 2006 that interest rate and currency derivatives outstanding amounted to $250 *trillion* dollars.

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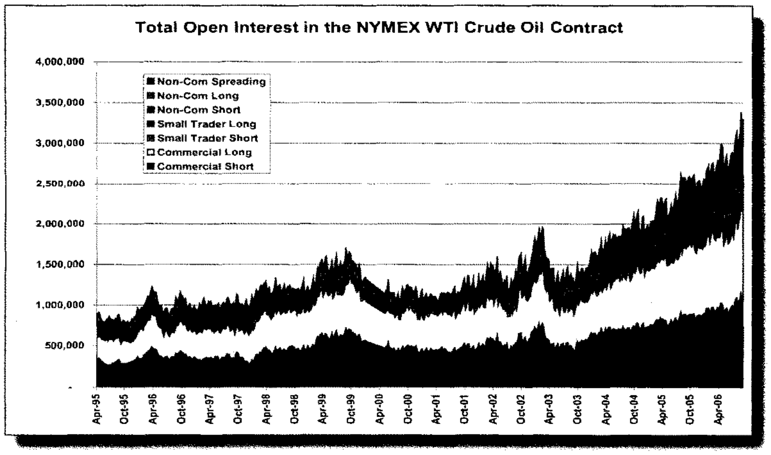
The Current State Of Financial Oil And Gas Markets

Volume and Open Interest on All Futures Exchanges

As shown in the chart on page 10, there has been a very substantial increase in the open interest in all of the commodities traded in U.S. futures markets since 1999. The next charts show the total open interest on U.S. futures exchanges over time in terms of three classes of traders: commercials (hedgers), non-commercials (large speculators), and "small traders."[31] The increase is quite substantial, representing in most cases increases in orders of magnitude in the amount of open interest in these contracts during the 1990s.

The open interest (futures and options) in the WTI crude oil contract and in the Henry Hub natural gas contract have continued to grow since the contracts were first introduced[32]. In the case of oil, the amount of investment accelerated sharply in 2003 to the equivalent of more than 3 billion barrels by September 2006[33]. It is normal and expected that "commercials" – or hedgers – would constitute the largest share of the open interest, as seen in the chart.

In the case of natural gas, open interest peaked in 2001, thanks to the migration of a large number of market participants from Enron to NYMEX. The demise of Enron caused overall liquidity to diminish in 2002, but it gradually recovered to set new records in 2006.



Total Open Interest in the NYMEX WTI Crude Oil Contract

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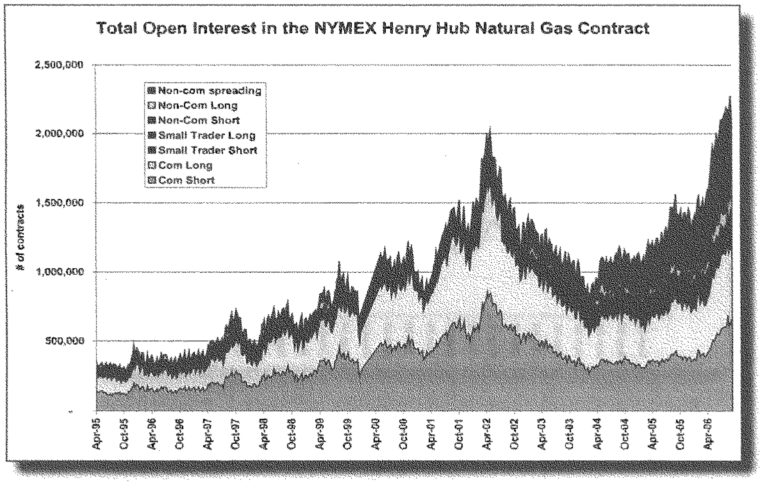
[31] The U.S. Commodity Futures Trading Commission (CFTC) reports the positions of three classes of traders: commercials (hedgers), non-commercials (large speculators), and "small traders." We believe most of the small traders would fall into the speculator category if they qualified in terms of the size of their trades.

[32] Both charts essentially "double count" the amount of open interest in the contracts, by showing both long and short positions of each of the trading cohorts.

[33] After September 2006, open interest fell sharply, as we discuss later in this section.

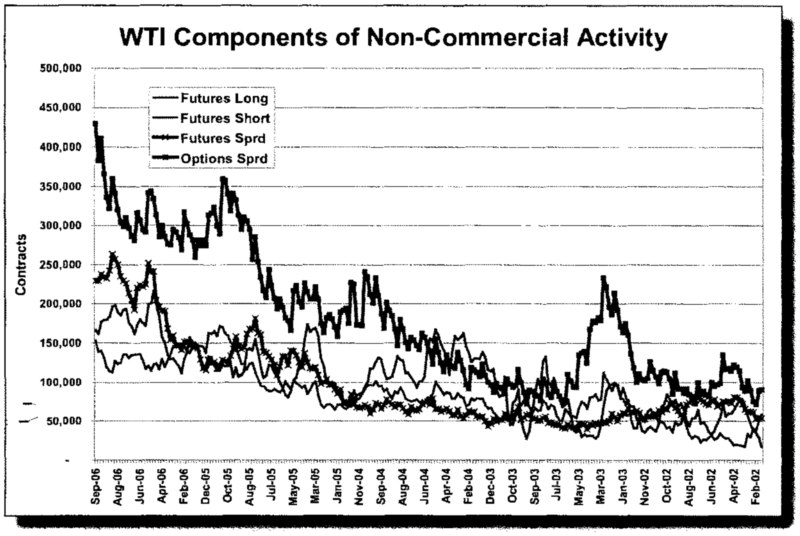
The market shares of non-commercial participants was quite high in the late 1980s (in the 15 – 20 percent range), fell well below 10 percent in the 1990s, and then increased again very substantially in the early 2000s. The third category in the chart represents the open interest of small traders. The combination of non-commercials and small traders in recent years constitutes a total of almost 40 percent of the total open interest.

The next chart presents a combined picture of futures and options positions. In the past decade, as trading and hedging strategies have grown more sophisticated, the use of options contracts has increased more dramatically than the use of futures contracts. The chart shows that, beginning in the late 1990s, the volume of open interest in NYMEX's WTI options contracts overtook futures-only positions and now constitutes a substantially larger number of contracts. Adding over-the counter contracts involving WTI would further dramatize the large growth in the demand for financial oil contracts. While there are no readily available data for OTC trade in crude oil, anecdotal evidence – as reported by knowledgeable observers like Alan Greenspan -- suggests that enormous increases have taken place in those markets, all indexed off the prices of WTI futures contracts on the New York Mercantile Exchange.



Trading in futures, options, and OTC contracts can be shaped as outright positions, or as spreads. Oil and gas contracts invite spread trading for a number of reasons. First, their price curve have historically oscillated between conditions of contango and backwardation. Those oscillations provide a basis for speculators to take spread positions (for example, selling an out-month contract and buying a near-month contract), which are usually less risky than outright positions. There is considerable evidence that hedge funds have become extremely active traders in these "calendar spreads." In 2006, one of the most accomplished hedge funds, Amaranth Advisors, lost a reported $6 billion in the space of a few weeks of trading in U.S. natural gas futures. As described by the *New York Times*, Amaranth "bet that the spread between natural gas futures for March 2007 and April 2007 would rise. In fact, it collapsed. Mr. Hunter [the Amaranth trader] could not sell his positions. Others in the market saw that his bullish bet was wrong, that he was losing money and they continued to bet against the market, pushing prices lower."[34]

This article suggests that even though spread trading may appear more conservative than outright trading, the positions that hedge funds sometimes take may be large enough to influence market pricing. Thus, as the use of spread trading has increased dramatically (as shown in the next chart[35]), so has the potential for spread trading to affect the structure of the crude oil price curve.[36]



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[34] Jenny Anderson, "Betting the House and Losing Big," New York Times, September 23, 2006.

[35] Although not shown in these charts, non-commercials have also significantly increased the relative amount of spread trades, as seen in the increase in liquidity for individual months beyond the first month contracts: non-commercials today have provided additional outright future liquidity throughout a progressively longer-dated energy price curve.

[36] Using the CFTC's mutually exclusive definition of 'Long', 'Short', and 'Spread' trades, the chart shows how the *relative* size of futures-only exposure has changed over time for non-commercials accounts in WTI. Since 1986, long positions, short positions and spread positions moved from essentially a 25:50:25 ratio to approximately 30:30:40 today. There are, therefore, relatively fewer outright short trades and many more spread trades in the market today than there used to be.

Beginning in 1995, the CFTC began to include the delta-equivalent[37] of options positions in their regularly published reports. The previous chart shows how non-commercials have recently shifted emphasis within their different kinds of trades (long, short, and spreads) by separating the individual components of options and futures for long, short, and spread trades. Clearly, the increases in both total interest and in the level of participation by non-commercials in the futures markets (and, one supposes, in the OTC markets) has been substantial. But has it had a distinct, *sui generic* impact on energy prices?

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[37] The expected change in an option's price given a one-unit change in the price of the underlying futures contract or physical commodity. For example, an option with a delta of 0.5 would change \$.50 when the underlying commodity moves \$1.00.

PART II: THE EFFECTS OF FINANCIAL MARKETS ON ENERGY PRICES

Governments of oil exporting and importing countries, oil producing and consuming companies, international organizations, and experts in a variety of intellectual disciplines have developed a strong interest over the past ten years in the impact of financial markets on the price of oil and natural gas. At stake is an answer to the following questions:

> How much influence has the substantial increase in energy trading in financial oil and gas markets had (a) on the increase in the outright price of oil from $11/barrel (December 1998) to $80 (August 2006), and natural gas from $1/70/MMBTU in March 1999 to more than $15/MMBTU in December 2005; (b) on the evolution of the *structure* of prices from contango to backwardation and back to contango, and (c) on the *volatility* of oil and gas prices?

Oil prices peaked at $80/barrel on August 7, 2006, and natural gas prices peaked at $15.78 in December 2005. Since the increase in prices occurred at the same time as the massive increase in the overall level of trade in futures and over-the-counter (OTC) markets, questions have naturally emerged about whether the increase in price was related to the increase in trading of financial oil and gas instruments, or whether the increase in trading was related to the increase in prices.

As we will see, some authoritative observers – like former Federal Reserve Chairman Alan Greenpsan and eminent oil economist Robert Mabro -- believe the financial markets have a *sui generis* impact on oil prices. If so, there must be "fundamentals of paper markets" that one must assess along with the fundamentals of the physical markets in order to obtain a complete view of oil pricing dynamics. Others are more skeptical, believing that futures and forward prices reflect only information about the fundamentals of the physical market. Some of those who believe the financial markets have a *sui generis* impact on prices are advocating stricter regulation of energy trading activities. Given the ease of international capital movements, however, it is unclear whether regulation in and by the United States would have much effect: squeezing one part of the energy trading balloon may only cause the bubble to appear elsewhere.

The Issue: Are Oil and Gas Prices a Bubble?

Discussions within the oil and finance community reflect various perspectives on the issue: do oil prices above $50/barrel and natural gas prices above $5 per MMBTU reflect classic commodity "bubbles" in which financial markets played a distinct, *sui generis* role, or a "new regime" of permanently higher prices brought about by sharp increases in demand, which pushed both crude oil and natural gas into suddenly much higher marginal production costs, and removed existing spare capacity from the system. Recognizing that both financial and physical dynamics are always at play, the issue nevertheless is whether the financial dynamics have a distinct and measurable role.

The bubble argument suggests that developments in financial energy markets (especially the increase in cash under management of hedge and other funds, and the decisions of index-oriented funds to take long positions in commodities, including energy) may have precipitated a classic period of "too many buyers chasing too few sellers" of financial oil instruments. Such periods of "excess demand" have occurred hundreds of times in competitive markets over the course of centuries. Once oil and gas developed futures and forward market instruments, with all of the fungibility characteristics of such instruments, they too became prey to purely financial bubbles. The potential for such bubbles increased in recent years because of the massive scale of increased involvement of financial institutions that heretofore had not been significant players in the energy space.

For example, Robert Mabro argues that

> "Econometric models show that the net position of the so-called 'non-commercial traders' is correlated with the subsequent direction of price changes. In other words, when the non-commercial entities hold a net long position (they are betting on a price rise) prices often do rise. And the opposite impact occurs when these entities hold net short position. Is it not odd that the non-commercial players (meaning very broadly the non-oil companies) should lead and the commercial entities (broadly speaking oil or energy companies, oil users and oil-related agents) should follow in what is supposed to be an oil market?"[38]

Others believe in variations of a "new regime" argument that has two dimensions. On the supply side, they would argue that there has been a permanent movement up the oil and gas production cost curve caused by a lack of investment by and in the petroleum extraction industry. On the demand side, there has been an increase in the rate of growth in oil and gas demand (the oil side mostly from Asia; the gas side mostly from increases in the use of combined cycle gas turbines by the power industry). Taken together, the new regime is characterized by increases in demand for oil and gas that exceed the increase in supply. Thus, the new regime argument indicates it was inadequate investment in production, not excess investment in financial energy markets that was primarily behind the massive price increases of 2000 – 2006. This may also reflect the risk created by recent political turmoil and rising resource nationalism in areas like Venezuela with substantial oil reserves. $60 may be the market oil price necessary to draw forth the investment required to develop the supplies that are on the margin.

In the oil market, many focus on the fact that spare crude oil production capacity has diminished, and there have been additional concerns over supply adequacy caused by the increasingly prominent "peak oil" thesis.[39] Such long-term concerns can explain why market participants have bid up the price at the back of the forward curve. Sellers at the back end of the curve may believe the peak oil argument is overblown, and that in any event marginal cost does not set the crude oil price.

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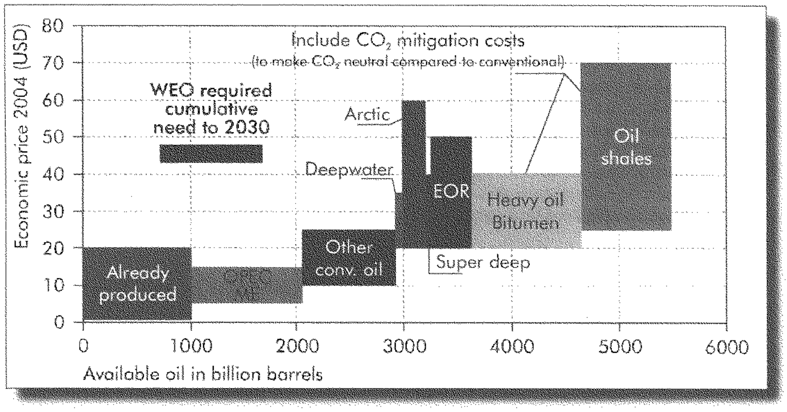
[38] Robert Mabro, "Robert Mabro Questions the Suitability of the Current Oil Price Regime," *Oxford Energy Forum*, February 2007, page 15.



A third and more nuanced view – in some variations related to Peak Oil – argues that the world has exhausted most of the oil that is available at finding costs of less than $10/barrel. This leads to a traditional, increasing-marginal-cost explanation for higher oil prices. The chart above presents the relationship between production cost, oil already produced, and the marginal costs of alternatives to "cheap oil" as seen by the International Energy Agency (IEA). The IEA supply curve indicates that there are 5 *trillion* barrels of oil available at "economic prices" of less than $70/bbl (in 2004 dollars). If this is correct, and the oil extraction business still responds to economic opportunities, then the market prices of $70/barrel reached in 2006 were unsustainable, and constituted a classic commodity "bubble." The financial energy markets, by providing such convenient vehicles for the financial expression of views about oil scarcity, will have contributed to the bubble.

The IEA supply curve is a useful tool for pointing out that the quantity of "OPEC ME" (OPEC Middle East) available oil is curtailed by instability (as with Iraqi oil), failure to maintain fields properly (as some believe is the case with Iranian reserves), and deliberate under-production of available reserves by governments who have decided that their nations' discount rates are very, very low. The conundrum is that there is still a great deal of oil in the "OPEC ME" category, available for exploitation at less than $15/bbl, but there are political constraints on its expeditious production. Those who invest in more expensive oil are essentially taking a political gamble: that this oil will continue to be held off the market, making it economical to invest in the production of more expensive conventional and unconventional oils. In essence, they are speculating on the assumption that the sub-$15 barrels are no longer on the margin.[40]

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[39] Those who adhere to the Peak Oil argument have developed , *inter alia,* regular conferences and journals reviewing the topic. See the Peal Oik web site maintained by Colin Campbell at http://www.peakoil.net/.

For investors, these arguments are of more than academic interest. Any investment in high-cost conventional oil resources runs the risk that the constraints on producing more of the sub-$15 oil pool will be relieved. Such relief could come from resolution of political conflicts in the Middle East, thus releasing the pent-up Iraqi reserves, or from a decision by Saudi Arabia to double its production.

In the absence of liquid financial energy markets, market participants could express their views on these issues in only two "physical" markets: the spot market, and the markets for oil in the ground.[41] The existence of financial energy markets provides a forum for the expression of views in the arena between spot markets and oil in the ground. Financial energy markets are available for the "prompt month" (which should converge with the spot price), and then for months and years into the future.

Concerns About the Impact of Financial Markets

As prices rose from the customary trading range of $10 to $30 in the 1990s, to $30 - $80 beginning in 2002, the debate about the role of financial markets became more heated, and attracted notable participants, especially in the United States. In the summer of 2006, a number of investigative committees of the U.S. Senate conducted hearings on the issue, and one committee—the Permanent Subcommittee on Investigations – issued an influential report titled *The Role of Market Speculation In Rising Oil and Gas Prices: A Need To Put the Cop Back On the Beat.*

Former Federal Reserve Chairman Alan Greenspan explained to the Senate Foreign Affairs Committee that there had recently been "a major upsurge in over-the-counter trading of oil futures and other commodity derivatives." Greenspan observed that "increasing numbers of hedge funds and other institutional investors began bidding for oil [and] accumulated it in substantial net long positions in crude oil futures, largely in the over-the-counter market," and that these activities affected oil prices: "These net long futures contracts, in effect, constituted a bet that oil prices would rise... With the demand from the investment community, *oil prices have moved up sooner than they would have otherwise.* "[42]

Mr. Greenspan also suggested that these price increases have stimulated additional oil production, a large increase in oil inventories, and a partial scale-back of consumption.[43]

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[40] Make reference to the announcements re investment in Shale and Tar Sands

[41] While derivative markets for oil have existed in some forms since the 19th century, we will date the emergence of the modern petroleum derivatives markets with the successful launch of the forward markets in the North Sea in the late 1970s and the successful launch of the New York Mercantile Exchange crude oil contract in 1984. We treat investments in oil producing companies as a subset of the market for oil in the ground.

[42] Greenspan, Alan. *Statement before the Senate Committee on Foreign Relations, United States Senate*, June 7, 2006.

[43] Coleman, Norm (Chairman). Levin, Carl (Ranking Minority Member). *The Role of Market Speculation In Rising Oil and*

The U.S. Senate sub-Committee investigating oil prices in 2006 concluded that:

> "[T]here is substantial evidence that the large amount of speculation in the current market has significantly increased prices. Several analysts have estimated that speculative purchases of oil futures have added as much as $20-$25 per barrel to the current price of crude oil, thereby pushing up the price of oil from $50 to approximately $70 per barrel."[44]

These opinions about the effect of speculation in financial energy markets on oil prices appear to be based on a fairly straightforward proposition: the large and sudden increase in the market position of any subset of oil market participants will tend to move prices up if the increase is in demand (expressed in financial energy markets as an increase in long positions) and down if the increase is in supply (expressed in financial markets as an increase in short positions). Even though there is "a long for every short and a short for every long," a sufficiently large market participant may be able to create sudden surges in supply or demand (or sudden shifts in the demand or supply curves of the oil market).

For example, assume that on a given day an extremely large speculator decides to go short. His brokers will then attempt to purchase 5,000 short contracts. All other things being equal, the effect of such a large increase in the number of shorts demanded is to drive down the price. The order for 5,000 short contracts amounts to a search for 5,000 long contracts, and in the open outcry process on the floor of the NYMEX, the bid price will fall until the necessary number of longs are attracted to take the offsetting positions for the 5,000 shorts.

The nature of any market – financial or physical – is that such a process can feed on itself. If the intra-day price decline forces prices below a technical support level, those who trade on such signals will be attracted into the market, creating further downward price pressure. Market participants can wonder what led to the price decline if nothing of consequence was indicated in the physical supply-demand equation.

For many economists, such effects can be expected only if two conditions exist: a large market participant is exercising market power, or subsets of market participants are (deliberately or coincidentally) acting together, or "herding" and the effect of their acting together is to exercise market power.[45]

Gas Prices: A Need To Put the Cop Back On the Beat, Staff Report, Permanent Subcommittee on Investigations, U.S. Senate, June 27, 2006, page 3. Hereafter, the Coleman [2006].

[44] Coleman, Norm (Chairman). Levin, Carl (Ranking Minority Member). *The Role of Market Speculation In Rising Oil and Gas Prices: A Need To Put the Cop Back On the Beat*, Staff Report, Permanent Subcommittee on Investigations, U.S. Senate, June 27, 2006, page 2.

[45] For a detailed presentation on the difference between these two market characteristics as it applies to financial oil markets, see Robert J. Weiner, *Do Birds of a Feather Flock Together: Speculator Herding in the World Oil Market*, (Washington DC: Resources for the Future Discussion Paper, June 2006).

Trading Entities and Their Trading Styles

While hedge funds have attracted much of the attention of the press, they are only a subset of all of the institutions that trade oil. Even within their own cohort, hedge funds are an extremely variegated herd, each with its own directives and trading strategies. The effects of the oil trades of these participants are unlikely to flow in the same direction.

Quite apart from hedge funds, commercial and investment banks make a variety of offerings to investors that, ultimately, result in a financial institution placing substantial hedge positions in the market. For example, some banks offer structured notes indexed on oil with fixed or guaranteed returns. The buyers of these notes are not oil market participants, and purchase them largely for portfolio diversification.

Of greatest recent interest is the role of yet a third type of trading entity in the energy sector -- index or passive investors, who are looking for portfolio insurance via commodity returns, and are prepared to pay for the portfolio benefit. These funds may buy an index, like the Goldman Sachs Commodity Index, which guarantees them the return of the index. The seller of that index, usually a bank, hedges the index exposure in the energy market by buying the futures that correspond to the index. Some participate as buyers in a Roll Index, which could entail, for example, buying the second month futures. When the prompt month expires, the Roll Index participant holds the prompt, which they sell to buy the second month futures contract again.[46] Others take the opposite view, and are roll sellers.

There is a substantial amount of anecdotal evidence that much of the increase in open interest in commodity contracts was precipitated by a decision of pension funds to increase their exposure to commodities. For example, the *Wall Street Journal* reported on September 9, 2004 that "at the start of the decade, Europe's two biggest pension funds had no commodity investments. Stichting Pensioenfonds ABP, the €157 billion ($190 billion) fund for Dutch government and educational-system employees, got into commodities in 2001 and has reached its target of having 2.5% of its assets, or close to $5 billion, in commodities. A year earlier, the €55.7 billion PGGM fund for Holland's health-and-welfare sector waded into commodities. It now has 4.3%, or roughly $3 billion, invested in them."

The interest in commodity exposure was not restricted to pension funds: "Harvard University has been investing in commodities for more than a decade, and its internal benchmark calls for allocating 13% of the university's $19.3 billion endowment to oil, gas and other commodities. That's just two percentage points less than the weighting assigned to U.S. stocks and two points more than the allocation to U.S. bonds. Unlike many pension funds that passively follow a benchmark, Harvard actively manages its commodity investments, and 10 percentage points of the 13 allocated to commodities are invested in timber."[47]

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[46] See, for example, Dizard, John, "Speculators Profit from Commodity Investors," which notes that speculators "In the pits, physical or electronic, bet against the certainty that commodity index investors' positions are rolled in a mechanistic manner every month, in known patterns on particular days." *Financial Times,* Jan. 22, 2007.

[47] Michael R. Sesit, "Commodities Enter Investment Mainstream," *Wall Street Journal,* September 9, 2004.

Within the financial community, however, it would be quite unusual for the trading activities of each of these entities to have effects in the same direction. To the contrary, one would expect that the effects of these traders on markets would *usually* be quite dispersed as each trader follows his own objectives. Anecdotal accounts refer to a variety of trading styles:

- *Mean reversion* traders believe that commodity prices tend to return to long-term averages, and thus their trades would tend to help market prices remain within given channels. *Chartists or technical traders* could accentuate trends when their systems indicate they should endure, and bring them to an end to when their systems indicate they should not. Notions of powerful "support" and resistance levels have long held sway over this community, and there is an array of software support available to those who trade in this manner.

- *Macro traders* believe in linkages between energy and other markets. These include incorporating views on macro-economic growth into energy trades (the "China syndrome"), or specific statistical relationships (dollar – yen – oil pricing dynamics).

- *Fundamental commodity traders* who believe they have superior information about energy supply and demand.

- *Passive investors* who only own energy contracts for their portfolio effects. In recent years, pension funds holding hundreds of billions of dollars hegan allocating a few percent to energy commodities. This so-called "index investing" is a trickle for this segment of the economy, however, it is a torrent of investment for the energy sector. Banks make various offerings to their private banking investors that, ultimately, may result in a financial institution placing substantial hedge positions in the market (whether these are shown as hedges in CFTC reports is unclear). For example, some banks offer structured notes indexed on oil with fixed or guaranteed returns. The buyers of these notes are not oil market participants, and purchase them largely for portfolio diversification.

- *Roll index* investors looking for portfolio insurance via commodity returns are prepared to pay for the portfolio benefit. They may buy an index, like the Goldman Sachs Commodity Index, which guarantees them the return of the index. The seller of that index, usually a bank, hedges the index exposure in the energy market by buying the futures that correspond to the index. Some participate as buyers in the Roll Index, which could entail, for example, buying the second month futures. When the prompt month expires, the Roll Index participant holds the prompt, which they sell to buy the second month futures contract again. Others take the opposite view, and are roll sellers.

[There are also simply gamblers who may try to take advantage of the known practices of investors that trade in a discernable pattern.]

Analysis of The Effects of Financial Markets on Oil and Gas Prices

In the past decade, various studies of the behavior of financial market participants have been conducted, and they have shed a considerable amount of light on what is, and is not, happening. In this endeavor, the primary source of data on financial traders' behavior is the "Commitment of Traders" report of the U.S. Commodities Futures Trading Commission (CFTC).

The CFTC divides market participants into "commercial" and "non-commercial" classes:

> "A trading entity generally gets classified as a "commercial" by filing a statement with the Commission (on CFTC Form 40) that it is commercially "...engaged in business activities hedged by the use of the futures or option markets." In order to ensure that traders are classified with accuracy and consistency, the Commission staff may exercise judgment in re-classifying a trader if it has additional information about the trader's use of the markets.
>
> A trader may be classified as a commercial in some commodities and as a non-commercial in other commodities. A single trading entity cannot be classified as both a commercial and non-commercial in the same commodity. Nonetheless, a multi-functional organization that has more than one trading entity may have each trading entity classified separately in a commodity. For example, a financial organization trading in financial futures may have a banking entity whose positions are classified as commercial and have a separate money-management entity whose positions are classified as non-commercial.
>
> The long and short open interest shown as "Nonreportable Positions" are derived by subtracting total long and short "Reportable Positions" from the total open interest. Accordingly, for "Nonreportable Positions," the number of traders involved and the commercial/non-commercial classification of each trader are unknown."

Finally, as noted earlier in this report, the CFTC provides an additional level of detail on the behavior of non-commercials with its reports on spreading activities:

> "For the futures-only report, spreading measures the extent to which each non-commercial trader holds equal long and short futures positions. For the options-and-futures-combined report, spreading measures the extent to which each non-commercial trader holds equal combined-long and combined-short positions." [48]

Published COT data, while interesting and useful, however, are incomplete and sometimes unclear. The most important omission is over-the-counter market transactions. As noted earlier, over the past several years, more and more forward transactions (both energy and non-energy) have moved from organized exchanges like NYMEX to platforms for bilateral and OTC trades, particularly the Intercontinental Exchange. Thus, it is appropriate to consider the volume and open interest data of the NYMEX the tip of energy trading iceberg.

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[48] See "Backgrounder" on CFTC web site http://www.cftc.gov/opa/backgrounder/opacot596.htm.

In addition, within the confines of the COT data, it is unclear how bright the line is between the "non-commercial" (a.k.a., speculators) and "commercials" (a.k.a., hedgers). Analysts disagree about the best way to use the data in the analysis of the influence of specific trading cohorts over prices. Some argue in favor of using total (commercial, non-commercial, and non-reporting) open interest, others total non-commercial open interest, and yet others net non-commercial open interest.

Even though the COT data are incomplete and unclear, they are all the data practitioners have. Thus, given that is information, the analytical community has naturally tried to find relationships between changes in trading positions and prices. After some ten years during which a number of studies – with varying degrees of rigor and focus – have been conducted, it is fair to say that – Robert Mabro's previous assertion (see page __) notwithstanding -- there is no consensus on whether financial markets exert a *sui generis* effect on the price of oil and gas.

Generally, formal statistical results on the issue are deemed unimpressive, which is to be expected given the dispersion of trading strategies already reviewed. A 2006 study conducted by the U.S. Commodities Futures Trading Commission concludes that,

> "on average, [managed money trader] MMT participants do not change their positions as frequently as other participants, primarily those who are hedgers. We find that there is a significant correlation (negative) between MMT positions and other participant's positions (including the largest hedgers), and results suggest that it is the MMT traders who are providing liquidity to the large hedgers and not the other way around. We find that most of the MMT position changes in the very short run are triggered by hedging participants changing their positions. That is, the price changes that prompt large hedgers to alter their positions in the very short run eventually ripple through to MMT participants who will change their positions in response."[49].

Robert Weiner, in a study published in 2006, obtained access to detailed COT data and conducted an analysis focusing on market power and herding. The study concludes that "the evidence indicates that speculators as a group did not herd during the time period for which data are available (mid-1990s). There is evidence, however, that some subgroups of speculators do tend to act in parallel ('flock'), notably commodity pool operators... Even among subgroups that flock, the extent of parallel trading is modest."[50]

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[49] See Michael S. Haigh, Jana Hranaiova and James A. Overdahl, Office of the Chief Economist, U.S. Commodity Futures Trading Commission, "Price Dynamics, Price Discovery and Large Futures Trader Interactions in the Energy Complex," April 28, 2005.

Another study was conducted by analysts from the International Monetary Fund, which compared the behavior of oil spot prices and the non-commercial positions in three commodities: crude oil, copper, and cotton. The IMF study – acknowledging that COT data had numerous characteristics that hindered definitive analysis –concluded that "[crude oil, copper, and cotton] prices appear less volatile than speculative positions across commodities, with no discernible common trend between prices and speculation. For example, in the crude oil market there has been no persistent pickup in net long noncommercial positions in recent years when oil prices have had a strong upward trend. More strikingly, in the copper market, net positions have actually fallen steadily over the past year, during which prices have reached record highs, suggesting that contrary to common perceptions, speculation may not have played a major role in the recent price run-up."

The IMF study left open, however, the possibility that – for shorter periods of time – there may be a stronger link between the positions of non-commercials and prices: "while the series do not appear to be correlated over the long run, for most commodities some correlation appears to be present over subperiods, as peaks and turning points seem to occur around the same time across the two series."[51]

Some Illustrative Analyses of Financial Market Effects on Oil Prices

If it is unsurprising that simple correlation studies would fail to find a long-term, systematic relationship between oil prices and the changes in trading positions, there remains an apparently large community who appear less impressed with an absence of statistical proof and more impressed with practitioner statements – such as those by Mr. Greenspan and Mr. Mabro – that appear to take for granted that financial markets have a *sui generis* impact on oil prices.

At the most general level, regulators appear to take for granted that "the funds" can affect the markets in which they participate. For example, the U.S. Federal Reserve Board's Patrick Parkinson testified before Congress that "Although the role of hedge funds in the capital markets cannot be precisely quantified, the growing importance of that role is clear. Total assets under management are usually reported to exceed $1 trillion. Furthermore, hedge funds can leverage those assets through borrowing money and through their use of derivatives, short positions, and structured securities. Their *market impact* is further magnified by the extremely active trading of some hedge funds. The trading volumes of these funds reportedly account for significant shares of total trading volumes in some segments of fixed income, equity, and derivatives markets.[52]"

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[50] Weiner, "Birds of a Feather," p. 2.

[51] Sergei Antoshin and Hossein Samiei, ""Has Speculation Contributed to Higher Commodity Prices?" in Name of IMF Report, (Washington, DC: International Monertary Fund), pp. 15-18.

[52] Patrick Parkinson, Deputy Director, Federal Reserve Board, Division of Research and Statistics, "The Role of Hedge Funds in the Capital Markets," Testimony Before the Subcommittee on Securities and Investment, Committee on Banking, Housing, and Urban Affairs, U.S. Senate May 16, 2006. Emphasis added.

The June 2006 report from the Senate Permanent Subcommittee On Investigations titled "The Role Of Market Speculation In Rising Oil And Gas Prices: A Need To Put The Cop Back On The Beat" cited (in addition to Mr. Greenspan), Citigroup, Goldman Sachs, and energy economist Philip K. Verleger, Jr. as being in the camp of those who believe there is a relationship between financial market activity (specifically, speculation, which is a narrower form of participation than we are reviewing in this paper), and oil prices.[53]

Clearly, given the different ways financial institutions participate in financial oil markets, simple regressions of the market positions of any particular cohort of market participants (including "non-commercials") with price changes are unlikely to be revealing. The trading community is much too variegated to have a simple, measurable effect. The fact is that financial markets offer a variety of participants, each with its own directives and trading strategies. Therefore, the effects of the oil trades of these participants would rarely flow in the same direction. An analysis of the long-term relationships between any particular group of traders and the price of oil or gas, therefore, is unlikely to provide much insight.[54]

More fundamentally, it would be naïve to expect any sustained causation between trading strategies and prices. Some trading strategies are based on the belief that markets eventually maintain fundamental relationships, and trades reflecting that belief can act as stabilizers to the market, and slow a market's adjustment to new developments. Chartists and trend traders, in contrast, can push the market quickly to new levels and can exaggerate price moves. Macro funds provide a linkage between commodity markets and other global investment markets. Fundamental commodity funds may actually enable futures prices to reflect the current expected future outcome, where current publicly available information is inadequate or inadequately distributed. This suggests that much of the time that their impacts would tend to cancel one another out, which is consistent with poor econometric results.

There are, nevertheless, several areas where causation should not be dismissed, all of them consistent with normal economic analysis:

1. *Perfect storm* episodes: there are likely to be periods of time when the condition of the physical energy market and trading strategies of financial market participants are in such good alignment as to produce "herding" and "bubbles" or their opposite, crashes.
2. *Variations on the market power syndrome:* It is possible that the positions of some market participants – index funds as one example – are so large as to constitute witting or unwitting market power. A large-scale infusion or retreat from any of the various positions by very large index funds might have price effects. The contract volumes involved in such shifts may -- in the scale of oil trading -- be quite large, but in the scale of money under management by these funds, be quite small. The index funds may be the "elephants in the bathtub" – especially in the long-dated markets.

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[53] Coleman [2006], p. 24-25.

[54] Economists call the tendency of traders to engage in similar strategies "herding." Robert Weiner has shown that there is little evidence of systematic and prolonged herding in the financial oil markets.

The chart on page 5 of this report traced developments in total open interest in the WTI futures contract and the price of prompt WTI. At a simple level, the correlation of these two data sets has an R^2 of 0.6 over the entire 1983 to 2006 period. In keeping with a theory that the financial markets occasionally have little impact on oil prices, there are periods (e.g., from 1996 to mid-1999) when there was a very low correlation between them, and other periods (e.g., from January 2001 to October 2006) when the correlation was quite strong (an R^2 of 0.8). These results invite a theory that (1) index funds may be biased to the long side of the WTI contract, perhaps because a long position in oil is used as a hedge against inflation, and (2) they tend to follow trends. That theory holds up quite well during the bull market for oil and other commodities that was evident from 2001 to 2006.

The analysis of the net positions of non-commercials – which we began in 1994 – reveals periods of greater and lesser correlation, *as is to be expected* given the dispersion of trading programs. The charts nearby define a net position as long minus short open interest, and break the 1986-2006 period into three parts:

1. 1986 to 1992, when (except for the period marking the Iraqi invasion of Kuwait and before the onset of the Gulf War that expelled Iraq from Kuwait) WTI was trading in a range of $10 to $20/bbl. During this period, non-commercials were usually net short and their swings from net long to net short appeared to coincide with decreases in the price of WTI.

2. 1992 to 1998: Non-commercials' positions oscillated between net long and net short in long trading cycles that tracked a WTI trading pattern between $14 and $26/bbl. At the end of that cycle, during the period marked by the Asian financial crisis, WTI prices sank to nearly $10/bbl.

3. 1999 to 2006: a great and extended bull market, beginning from the depths of the Asian economic crisis, brought oil prices from $20 to $70. The non-commercials were usually on the long side of this trend. Open interest in the WTI contract rose rapidly during this period. Anecdotal evidence indicated new money from index and pension funds, pulled into oil markets by financial advisors urging their clients to increase their long exposure to commodities. This inflow would have helped to accelerate the oil price increase. Their high rates of return in 2004 and 2005 fed the impulse of other funds to get on the long side of oil. This trend continued into early 2006. When it appeared near the end of the year that the long bull market was over, funds rapidly bailed out of their positions, accentuating the downward pressure on prices which pushed prices back towards $50/bbl by the end of the year.[55]

In these charts, the visual correlation between the net positions of the non-commercials and the price of WTI occasionally supports a conjecture that sudden changes in the preferences of speculators may be among the causes of changes in the price of oil.

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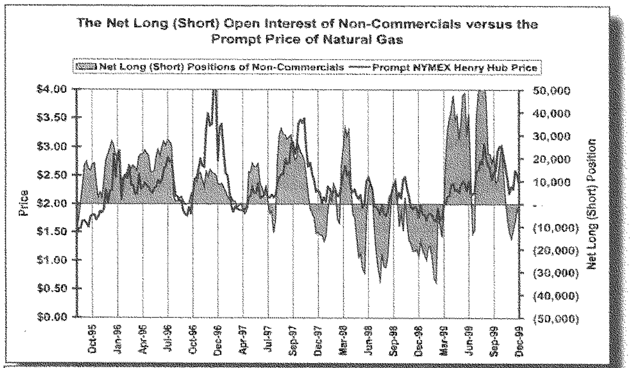
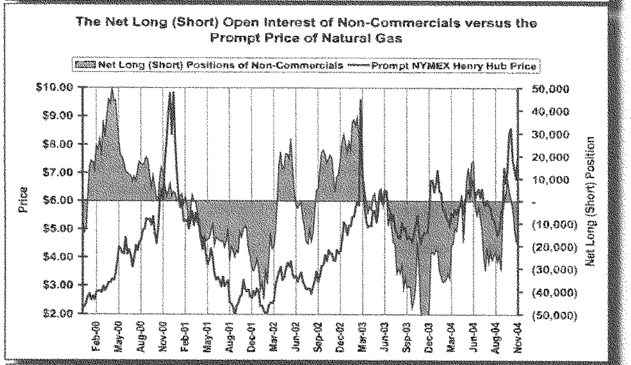
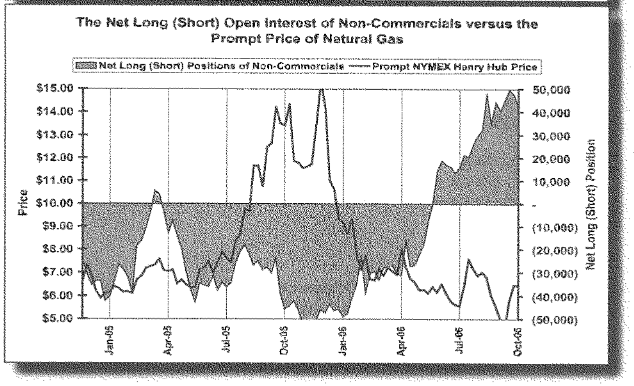
[55] It is important to note that the charts match *weekly* COT data with the price of prompt (first month) WTI. Correlation statistics are highly sensitive to the time period chosen, which is consistent with a theory that the influence of financial markets on oil prices waxes and wanes. The inter-relationship between events in the physical market and financial markets are extremely complex.



The Net Long (Short) Open Interest of Non-Commercials versus the Prompt Price of Natural Gas



The Net Long (Short) Open Interest of Non-Commercials versus the Prompt Price of Natural Gas



The Net Long (Short) Open Interest of Non-Commercials versus the Prompt Price of Natural Gas

A third approach to the study of the effects of financial energy markets is to evaluate the relationship between the spread positions in the NYMEX WTI contract and the price of WTI. The volume of spread trades has increased enormously, and now outweighs the number of outright trades. It is interesting to observe that there is a high positive correlation (R^2 of 0.86) between the amount of open interest in spread trades (futures and options) and the price of WTI. Without knowing more about the structure of the time spreads (a study that goes beyond the scope of this report but which might yield some interesting results), it is difficult to know exactly what the implication of this correlation may be.

Potential Hypotheses for Further Evaluation

We continue to develop these analyses of the relationship between non-commercials and crude oil prices. Among the price hypotheses to be explored in future work are:

1. **Financial traders tend to reinforce price floors and ceilings until fundamental forces move them.** Whenever crude oil prices are at the top of the presently established trading range, and non-commercials have a large net long position, we would expect prices to weaken because non-commercials will sooner or later abandon their net long position. As the following charts indicate, however, over time these trading ranges change in reaction to important fundamental events. In economic parlance, both the supply curve and the demand curve have shifted as oil became thoroughly "financialized." Thus, it is productive to look at crude oil prices since 1986 in terms of three cycles: 1986–1992, 1993–1998, 1999-2006.

2. **Financial traders' "turnover" of trading positions is one of the primary forces in the movement of oil prices between the top and bottom of the trading range**. Speculative traders – especially professional hedge fund managers – are paid to make profits, not to sit on profits. There have been extensive periods of time during which there are two to three cycles of bull-and-bear trading (i.e., going long/going short) per year.

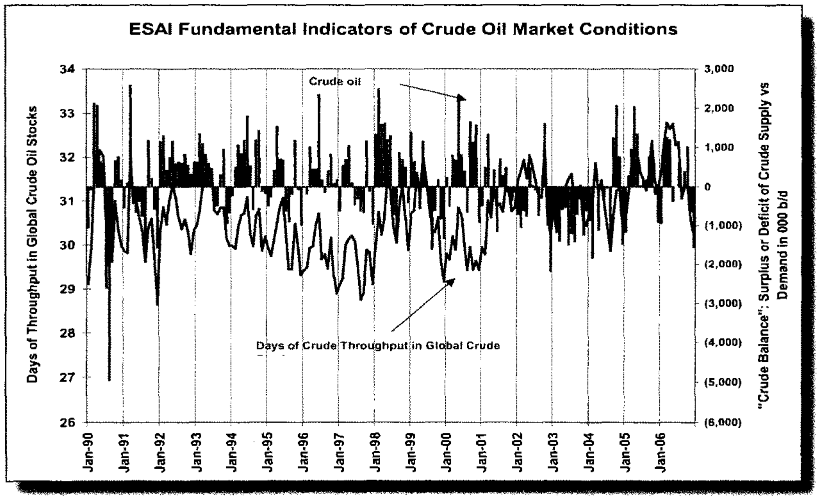
3. **Financial trading affects backwardation and contango.** Since 1983, the crude oil price curve has been in backwardation (defined for the sake of this discussion as a condition in which the prompt price is higher than the 12th month price) 68 percent of the time, and in contango (a condition in which the prompt price is lower than the 12th month price) 32 percent of the time. Backwardation is typically associated with periods of spot market tightness, and contango with periods of spot market surplus. Often, the bigger the net long position of non-commercials, the more likely the market is to be in backwardation. This reinforces the oil market's *typical* tendency to be in backwardation, because speculators are more often net long WTI than net short WTI.

Fallibility of "the Funds"

Neither hedge funds nor any other cohort of the speculator community are infallible. As the nearby charts, as well as anecdotal evidence, indicate, there are limits to the ability of speculators not only to anticipate but also to influence markets. While WTI is an excellent vessel for holding traders' fears and hopes, the very complex dynamics of global crude oil physical demand and supply exerts itself inexorably, albeit opaquely (because of the highly imperfect state of world crude supply and demand data).

There is an inclination, especially among traders, to assume "the financial market is always right." The record clearly shows, however, that speculators are far from infallible. As the example of Amaranth (and its predecessors like Long Term Capital and Metallgesellschaft) demonstrates, they often make mistakes. Their mistakes are visible both in outright and in spread trades.[56]

For example, ESAI has maintained a proprietary database of crude oil supply and demand (aka, refinery intake of crude oil) since 1984. It has developed several metrics of the condition of global crude oil supply and demand. One of those metrics, ESAI's "Crude Balance," which measures the surplus or deficit of crude supply versus demand, indicated for the winter and spring of 2003 that, while the speculators were aggressively short-selling WTI, the global fundamentals were quite tight. At the same time, there were plenty of political issues (tensions in the Middle East, deteriorating supply conditions in some exporting countries) that were keeping market participants – with the exception of speculators in the WTI market – extremely apprehensive. Thus, the spring of 2003 represents a case where "the non-commercials" had a bearish view of the market, but "tbe fundamentals" drove the market in the other direction.



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[56] Amaranth reportedly lost $3 billion in a period of a few months by trading in the hyper-volatile U.S. natural gas market For an account, see "Betting the House and Losing Big," *The New York Times*, Sep, 23, 2006.

Implications For Capital Market Transactions

Oil and gas forward curves are not conscious forecasts of oil prices; instead, they are the market-clearing prices of transactions in different periods in time. As such, they have all of the strengths and weaknesses of any other market-clearing price. If there are a lot of transactions, and transactions are properly dispersed among many participants, a forward market by definition has *depth* and *liquidity*, both highly-regarded attributes. If there are very few transactions, or there are few participants, then the market has neither depth nor liquidity and is likely to be prone to the exercise of market power.

If all forward transactions were on well-regulated exchanges (like the New York Mercantile Exchange), the depth and liquidity of forward energy markets would be relatively easy to assess. As discussed in Part I of this report, however, there have always been over-the-counter energy markets, and these have always been relatively opaque. Whether the market-maker is Enron (now, of course, no longer on the scene but a remarkably influential player in this arena until its demise), or Goldman Sachs, or the Intercontinental Exchange, it is extremely difficult to pin down the depth and liquidity of oil, gas (and power) forward markets, once one has gone beyond the third year of quotations on the NYMEX exchange.

In the visible, NYMEX-based oil and gas futures markets, there is decreasing liquidity as one goes from prompt to far forward months of the contract. That decline in liquidity is not smooth, however, because the market appears to favor trading in certain "out months" more than in others.

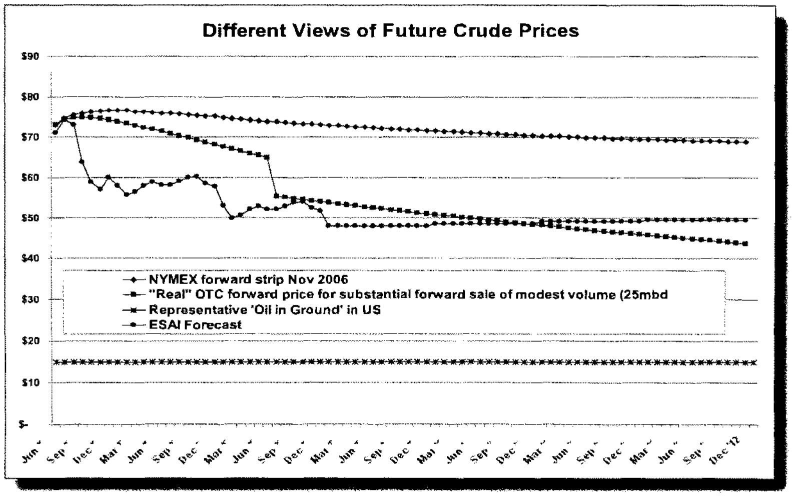
There are, therefore, four fundamentally different types of oil prices, defined by the date, and by the liquidity:

1. Spot oil prices, which have various levels of liquidity depending on the type of oil traded, and the location of the cargo or parcel;
2. The forward price of oil on the NYMEX exchange where the quoted months have substantial liquidity;
3. The price that an investment bank is willing to quote for longer-dated (e.g., ten-year) strip with a credit-worthy counterparty in an over-the-counter transaction; and
4. The price paid for "oil in the ground" that will take years or decades to extract.

At any given time, the relationship between spot, futures, OTC, and a pure capital market transaction for oil in the ground can be quite variable. Market participants are somewhat handicapped in understanding where the relationships are at any point in time because some of the information is harder to get than others. OTC and asset acquisition transactions, for example, are often private deals whose pricing is not revealed.

The chart below, nevertheless, represents an approximation of where we believe the various temporal markets for crude oil were in November 2006:

1. The spot price was $70/barrel.
2. The futures strip between the prompt and the sixth month was in contango, then was backwardized to the end of the period quoted by the NYMEX.
3. The line representing the "real" OTC forward price in the chart assumes a price drop for a seller of a substantial volume of oil. The decline in liquidity in the futures exchanges is so substantial after the third year that it is likely that anyone seeking to buy or sell a large volume of oil in years 4 and after would have to go to the over-the-counter market, and would likely have to bear a premium of some sort. What that seller actually encounters depends on the volume, the timing, and the appetite of its counterparty for such a long-dated transaction. The exact relationship between the NYMEX far-dated quotes and what a market participant could actually get is unclear – we have inserted a discontinuity in the chart above simply to make the point.
4. The "ESAI forecast" price reflected an analytical view that the spot price in the future would be quite different from the strip of prices quoted by the NYMEX in November 2006.
5. The last and lowest price line is a hypothetical acquisition cost for "oil in the ground" in a transaction involving reserves in the United States. The actual per-barrel cost of such transactions will depend on the location, the period it takes to get the oil out, and the discount rates used by the buyer and seller. The price might be as low as $5 and as high as $25 per barrel in the November 2006 market. For transactions in areas with much higher political risk, the oil in the ground might have a much lower value than even $5 per barrel.



The pivotal question raised by this chart (which is only a snapshot of a point in time in November 2006) is how the visible price indexes – spot and futures strips – affects the less visible indexes – the price at which capital market transactions take place – over time. This relationship would be useful to know for various reasons:

1. For institutional investors, at any point in time, does the level of prices in the forward market reflect a "bubble" that buyers of oil and gas production assets should discount in valuing those assets?
2. For individual investors, do the share prices at which oil and gas production reflect a discount rate that properly accounts for the "bubble" (or the lack thereof, if that is our view?)
3. For those who engage in calendar year or multi-year strategic hedging, how much should the hedger pay for instruments that allow it to escape from a particular price commitment? If "better research" indicates a given price level is a bubble, then a buyer hedger may be well-advised to spend more money on a participation swap that makes it possible to participate in very large downward price moves (e.g., from $80 to $50/barrel).
4. For those acquiring oil reserves or properties that are believed to contain oil reserves, there are deals where a company bought reserves, and immediately turned around and sold the first four or five years of production forward to investment banks. Publicly traded oil producers may not be interested in such transactions if they believe their shareholders want undiluted commodity price risk. Private equity players seeking a given rate of return, however, may find such structures more enticing.

From the perspective of January 2007, when this was written, it now appears that the level to which oil prices rose in 2006 was indeed a bubble, and it is also clear to the authors that it was possible – by a combined analysis of physical and financial oil markets – to responsibly reach that conclusion in the middle of the bubble. Put another way, we believe that it is possible – through analysis and intelligence – to shed light on what we called the mystery of the effects of financial markets on oil pricing. Those who would invest in hydrocarbons in the long term – through acquisition of oil and gas in the ground – will benefit from including a review of the effects of financial markets on prices in their due diligence before deciding what is a reasonable price for their purchase.

Regulatory Implications

Largely because of data quality issues, the effects of financial markets on energy prices is (to return to Gregory Treverton's useful distinction) a mystery rather than a puzzle. As such, it is a problem that is more amenable to an "intelligence" approach to analysis (as in the Central Intelligence Agency), than to a purely statistical approach. Because of the global complexities of both the physical and financial energy markets, it is unsurprising that purely statistical analysis of the relationship between specific data sets (such as the open interest of non-commercials) and energy prices will not provide an answer.

How can energy market participants anticipate large and sudden shifts in the financial energy markets? Not easily[57]. At first glance, COT futures data tell a simple story: there is always a short for every long. As the volume and open interest change, then the long and short positions taken by commercials, non-commercials, and small traders change from day to day and week to week. As with physical market data, the COT data are imperfect at best. COT data are simply clues in a complex detective story. Why did non-commercials increase their short positions? Why did commercials and/or small traders do the opposite?

We agree with Mr. Greenspan and others who believe organized speculators now affect the value of many of the assets involved in world trade. No one would object to this if only soft drink prices were affected by their activities. But when they drive up the price of the fuels that keep people from freezing, of the equities that hold the store of wealth of savers, and of the currencies that determine a nation's stature in world affairs, it is no wonder that we hear cries of alarm from government officials. Malaysian Prime Minister Mohathir is by no means the first nor will he be the last to complain about the market power of "the Funds" and of unscrupulous traders.

In the United States, calls for reform of the rules governing speculation tend to focus on two issues: *greater disclosure* and *larger margin requirements*. On the disclosure front, the U.S. Commodities Futures Trading Commission, during the tenure of the Bush Administration, has been disinclined to apply futures-style disclosure requirements on the burgeoning over-the-counter market.

The implosion of Amaranth, however, has rekindled calls for greater disclosure.[58] The most prominent specific measure that has surfaced in Washington, DC is the "Oil and Gas Traders Oversight Act of 2006."[59] The act – only two pages in length – simply requires that "The [CFTC] Commission shall prescribe rules requiring such regular or continuous reporting of positions in a *reportable contract* in accordance with such requirements regarding size limits for reportable positions and the form, timing, and manner of filing such reports under this paragraph, as the Commission shall determine." A *reportable contract* is defined as "a contract, agreement, or transaction involving an energy commodity, executed on an electronic trading facility, or a contract, agreement, or transaction for future delivery involving an energy commodity for which the underlying energy commodity has a physical delivery point within the United States and that is executed through a domestic terminal."[60]

Critics of this legislation contend that such disclosure will simply cause the trading activity to migrate away from the United States. This seems disingenuous:

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[57] Newspaper accounts in January 2007 indicated that "Wall Street commodity funds that have been investing heavily in energy futures are now loading up on agricultural commodities like corn and livestock futures." See "Wall Street is Betting on the Farm," *New York Times*, January 19, 2007.

[58] See in particular, Coleman and Levin, *The Role of Market Speculation In Rising Oil and Gas Prices: A Need To Put the Cop Back On the Beat*, Staff Report, Permanent Subcommittee on Investigations, U.S. Senate, June 27, 2006, page 3.

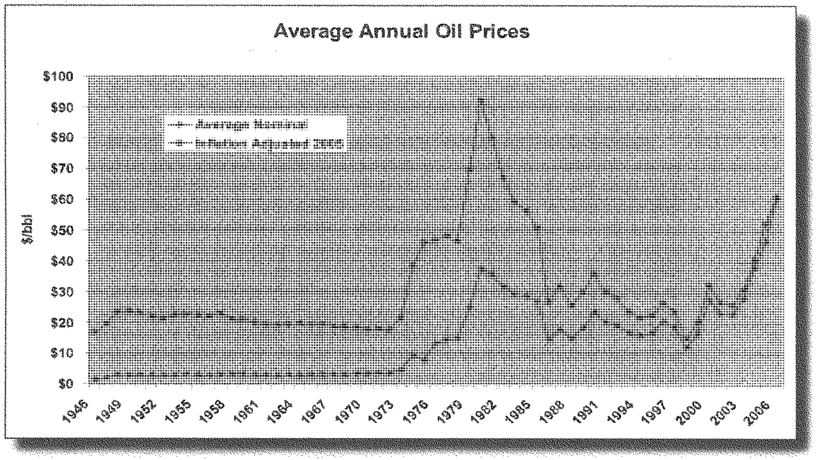
[59] The influential business journalist of the *New York Times*, Gretchen Morgenson, called for passage of the Act in a September 24, 2006 article titled "Dangers of a World Without Rules."

[60] *Oil and Gas Traders Oversight Act of 2006*, available at http://thomas.loc.gov/cgi-bin/query/z?c109:S.2642:.

one of the reasons these markets use American futures contracts as benchmarks is because they have faith in the underlying integrity of the American financial system, in comparison with the alternatives. There seems to us to be no compelling reason not to require such reporting, at least for U.S.-centered trade, and for European and Asian regulators to implement similar reporting programs.

On the issue of *margin requirements,* we believe the influence of speculators cannot be eliminated without throwing the baby – the efficacy of market forces – out with the bath water. Government officials and most well-informed market participants are aware that markets cannot thrive without the depth and liquidity speculators add to markets, without speculators to embrace the risk that others shun, and without speculators' restless pursuit of new financial instruments that – in spite of all of the concern about derivatives – still promote financial flexibility and creativity. In short, speculators make markets work better, albeit at a cost.

The cost, as both the academic literature and practitioners recognize, is greater volatility. Markets with higher concentration of professional speculators tend to exhibit greater price volatility. In the short run, say, over a couple of months or at most a few years, this volatility is inconvenient and even painful to those on the wrong side of the price cycle. Thus, the relatively high oil prices of 2002 to 2006 were painful for consumers, the low price of 1998 for producers. Such volatility has adverse effects on industries that have capital intensive, complex infrastructures. Uncertainty and volatility retard investment, which in turn contributes to volatility in such infrastructure dominated markets. So, even though energy prices tend to average out in the end, a reduction in volatility can reduce the pain of getting there. Stated another way, while speculators thrive on volatility, voters and other interested parties do not, hence increased calls for regulation.



Source: http://www.inflationdata.com/inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp

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In the long run, commodity prices and exchange rates in freely traded markets tend to return to an economically rational level. Thus, oil prices – thought in the late 1970s and early 1980s to be on a constantly rising path – in fact showed a remarkable propensity to return to a very long-term average level of around $25 per barrel, as shown in the chart below, which depicts oil prices since 1946 in inflation-adjusted terms. After 2000, the price ratcheted up to levels not seen (in real terms) since the 1980 oil crisis. It appears from our analysis that the increase in demand for paper oil barrels over the past several years helped to drive those prices up. But if we have learned one thing about commodity speculators over the years, it is that they are quite willing to trade a commodity down as well as up. Thus, if the fundamentals of oil – the supply curve, the levels of demand, and inventories – conspire to drive short-term prices back down to that long-term $25/barrel level, speculators will ultimately help to get it there.

If the desire to regulate speculators further cannot be restricted to just additional disclosures, the most direct and effective measure would be to reduce their leverage by *increasing the margin requirements in exchange traded markets*. Thus, the margin on a million dollar crude oil contract could be raised by, say, 20 percent, without substantially impairing liquidity. Funds and exchanges, of course, will resist this suggestion because it would adversely affect the liquidity of their markets. And so it would, but if this segment of the financial community does not regulate itself more effectively, chances increase that governments will ultimately regulate them out of existence.

It behooves the defenders of the new *status quo* – market economists, investment bankers, and Fund managers – to do everything they can to shed maximum light on these markets. There is still an astonishing lack of disclosure of some of the information that helps make market forces explicable. Until January 2007, for example, only the American futures markets were required to collect commitment of traders data. In the future, it is likely that OTC markets will have to do so[61]. Such vital market information as petroleum inventory levels are still not published in a timely basis by the leading oil producing countries. Saudi Arabia, the world's largest oil producer, fails to publish any timely details of its operations[62].

Thriving markets have an insatiable appetite for information. It is up to governments – the same ones that have surrendered some of their controls to the market – to ensure that adequate flows of information exist to feed the markets to which they have entrusted their fates. Governments must insist that those who sell critical commodities and associated financial services – whether it be Saudi Arabia or ICE or NYMEX – disclose enough information to ensure that known abuses (like insider trading), and preventable problems (like development of market power by an aberrant single hedge fund or herd of funds) do not fatally undermine the efficacy of the markets. At the end of the day, markets exist because governments allow them to. Support for oil, gas, and electricity markets is ebbing, inside and outside the United States, and advocates of markets as the best way to organize energy activities must do all they can to shore up that support.

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[61] On January 30, 2007, *Platts Energy Trader* reported that ICE was reporting large gas trading positions to the CFTC on a daily basis.

[62] See, however, www.JODIDATA.org for information about the Joint Oil Data Initiative, which is headquartered in Saudi Arabia.

Order Code RS21401
Updated March 19, 2008

CRS Report for Congress

Regulation of Energy Derivatives

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Summary

After the collapse of Enron Corp. in late 2001, that company's activities came under intense scrutiny. Much of its business consisted of trading financial contracts whose value was derived from changes in energy prices. Enron's derivatives trading was largely "over-the-counter" (OTC) and unregulated: little information about transactions was available. Trading in energy derivatives rebounded after a post-Enron slump, and much of the market remains unregulated. This "regulatory gap" strikes some observers as dangerous for two reasons. First, the absence of government oversight may facilitate abusive trading or price manipulation. A June 2007 report by the Senate Permanent Subcommittee on Investigations concluded that excessive speculation by the Amaranth hedge fund, which collapsed in August 2006, had distorted natural gas prices. Second, the failure of a large derivatives dealer could conceivably trigger disruptions of supplies and prices in physical energy markets (though the effect was minor in the Enron case). On the other hand, federal financial agencies have taken the position, in hearings and written statements, that market discipline and self-regulation are sufficient to deter price manipulation, and that new legislation is not required.

A number of bills before the 110th Congress would give the Commodity Futures Trading Commission (CFTC) enhanced authority to regulate certain energy trades on markets other than the regulated futures exchanges. The Senate-passed version of H.R. 2419 (the Farm Bill) would impose exchange-like regulations on electronic over-the-counter markets that play a significant role in setting energy prices. These provisions mirror an unnumbered CTFC reauthorization bill reported by the House Agriculture Committee in December 2007. This report summarizes energy derivatives regulation and proposed legislation. It will be updated as developments warrant.

Energy derivatives — financial contracts whose value is linked to changes in the price of some energy product — are traded in several kinds of markets: the futures exchanges and the off-exchange, or over-the-counter market. The New York Mercantile Exchange (Nymex) offers futures contracts based on prices of crude oil, natural gas, heating oil, and gasoline. (Other futures exchanges offer energy-related contracts, but Nymex is by far the busiest.) Futures exchanges — called "designated contract markets" — are regulated by the Commodity Futures Trading Commission (CFTC) under the Commodity Exchange Act (CEA). The CEA imposes a range of mandates on the exchanges (and on futures industry personnel) regarding record keeping (including an audit trail for all trades), registration requirements, market surveillance, financial standards, sales practices, handling of customer funds, and so on.

The second trading venue for energy derivatives is the off-exchange, or over-the-counter (OTC) market. Unlike the futures market, there is no centralized marketplace for OTC derivatives. Instead, a number of firms act as dealers, offering to enter into contracts with others who wish to manage their risk exposure to energy prices. OTC contracts based on energy products are generally exempt from regulation under the CEA, so long as the contracts are offered only to "eligible contract participants," defined as financial institutions, professional traders, institutional investors, governmental units, and businesses or individuals who exceed various asset and income thresholds. The law assumes that sophisticated parties such as these do not need the investor protections that government regulation provides for small public customers of the futures exchanges.

In recent years, a hybrid form of market has emerged, which resembles the exchanges in that multiple parties can trade on an electronic platform, but which is largely exempt from CFTC regulation. These markets are known as "exempt commercial markets." They must notify the CFTC before they begin operations, and provide certain basic information about themselves, but they are not required to monitor trading or enforce CEA prohibitions against fraud or manipulation. The CFTC has limited jurisdiction over these exempt markets: it can take action against fraud and price manipulation. In addition, if the exempt market plays a significant role in setting commodity prices, the CFTC can require public disclosure of certain price and volume data.

To traders, whether they are speculating on price changes in search of profit or using derivatives to protect themselves from the price risk associated with producing or purchasing physical energy commodities, these markets are basically interchangeable.

Historical Development of Derivatives Regulation

In 1974, Congress observed that derivatives trading was about to expand from its traditional base in farm commodities into financial futures — contracts based on bonds, interest rates, currencies, and so on. To ensure that derivatives traders received the same protections whether they were trading pork bellies or T-bonds, P.L. 93-463 created the CFTC to oversee all derivatives trading, regardless of the nature of the underlying commodity. The CFTC was given exclusive jurisdiction: all contracts that were "in the character of" futures contracts had to be traded on a CFTC-regulated futures exchange.

There were two major exceptions to this exchange-trading requirement. Forward contracts, where actual delivery of the commodity would take place at the expiration of the contract, were considered cash sales and not subject to the CEA. Second, the so-called Treasury Amendment (part of the same law that created the CFTC) specified that contracts based on foreign currencies or U.S. Treasury securities could be traded off-exchange. Existing markets in these instruments had long used futures-like contracts and appeared to function well without direct government regulation; Treasury saw no public interest in bringing them under the new CFTC.

During the 1980s, a market in OTC derivatives evolved, utilizing swap contracts that served exactly the same economic functions as futures. The first swaps were based on currencies and interest rates; later, OTC contracts based on commodity (including energy) prices were introduced. These OTC markets were well established before the CFTC made any move to assert its jurisdiction, despite the fact that swaps were clearly "in the character of" futures contracts. The potential CFTC jurisdiction, however, created legal uncertainty for the swaps industry: if a court had ruled that a swap was in fact an illegal, off-exchange futures contract, trillions of dollars in outstanding swaps could have been invalidated. This might have caused chaos in financial markets, as swaps users would suddenly be exposed to the risks they had used derivatives to avoid.

The CFTC issued a swaps exemption in 1989, holding that the CEA gave it authority to regulate swaps, but that it would not do so as long as they differed from futures contracts in certain enumerated respects. In 1992, Congress gave the CFTC additional authority to exempt OTC contracts (P.L. 102-546). In response, the CFTC modified the 1989 swaps exemption in 1993, and also issued a specific exemption for OTC derivatives based on energy products.[1] Under the 1993 exemption, OTC energy derivatives would not be regulated if all trading was between principals whose business involved the physical energy commodities underlying the derivatives, if all contracts were negotiated as to their material terms (unlike futures contracts, where terms are standardized), and if all contracts were held to maturity (rather than traded rapidly, as futures are).

This exemption was a matter of regulation, not statute. In May 1998, the CFTC issued a "concept release" that indicated that it was considering the possibility of extending features of exchange regulation to the OTC market. The release solicited comments on whether regulation of OTC derivatives should be modified in light of developments in the marketplace. Among the questions were whether the existing prohibitions on fraud and manipulation were sufficient to protect the public, and whether the CFTC should consider additional terms and conditions relating to registration, capital, internal controls, sales practices, record keeping, or reporting.

The concept release drew strong opposition from the swaps industry and from other regulators, especially the Federal Reserve. In December 1998, Congress included in the Omnibus Appropriations Act (P.L. 105-277) a provision directing the CFTC not to propose or issue any new regulations affecting swap contracts before March 31, 1999. In November 1999, the President's Working Group on Financial Markets issued a report entitled "Over-the-Counter Derivatives Markets and the Commodity Exchange Act." The report recommended that, to remove uncertainty about the legal and regulatory status of the OTC market, bilateral transactions between sophisticated parties that do not involve physical commodities with finite supplies should be excluded from the Commodity Exchange Act; that is, the CFTC should have no jurisdiction. While the Working Group's report made a distinction between financial commodities and those with finite supplies, and suggested that continuing CEA jurisdiction was appropriate for the latter, the report did *not* recommend that the CFTC should rescind its exemption of OTC energy derivatives. In other words, the Working Group saw no immediate problem with the unregulated status of OTC markets in energy derivatives.

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[1] "Exemption for Certain Products Involving Energy Products," *Federal Register*, vol. 58, April 20, 1993, p. 21286.

In 2000, Congress passed the Commodity Futures Modernization Act of 2000 (P.L. 106-554, H.R. 5660). That legislation established three classes of commodities. First, financial variables (interest rates, stock indexes, currencies, etc.) are defined as "excluded commodities," and OTC contracts based on these are not subject to the CEA (provided that trading is restricted to "eligible contract participants," that is, not marketed to small investors). Second, derivative contracts based on agricultural commodities generally cannot be traded except on the futures exchanges; these remain under CFTC jurisdiction. Finally, there is an "all other" category — "exempt commodities" — which includes energy products. Contracts in exempt commodities can be traded in the OTC market without CFTC regulation provided that no small investors participate. However, certain antifraud and antimanipulation provisions of the CEA continue to apply. If an OTC exchange is created — defined in the legislation as an "electronic trading facility" where multiple buyers and sellers may post bids and trade with each other — the CFTC has some oversight jurisdiction and may require disclosure of certain market information.

In summary, the OTC energy derivatives market developed outside CFTC jurisdiction in the late 1980s and early 1990s, despite the CEA's apparent prohibition of such a market. As with financial OTC derivatives, however, the CFTC never challenged the legality of this off-exchange market. As concerns about legal uncertainty mounted, the CFTC in 1993 issued an exemption stating that certain OTC energy transactions did not fall under the CEA. In 2000, Congress essentially codified this exemption, by including energy in the category of "exempt commodities." This removed them from even the possibility of CFTC regulation, except for a limited antifraud and manipulation jurisdiction and some oversight if the market for OTC contracts should evolve into an exchange-like market. Thus, the 2000 legislation did not deregulate the OTC energy derivatives market; that market had been unregulated since its beginnings.

Manipulation in Energy Markets

Since the value of derivatives contracts is linked to the price of the underlying commodity, traders who can manipulate commodity prices can reap huge profits. Manipulative strategies may involve either physical (spot) or derivatives markets, or both. Since the Enron scandal, regulators have taken numerous actions against several types of manipulation in energy markets.

In 2003, the CFTC charged Enron with manipulation of natural gas prices. The strategy was simple: Enron purchased an unusual number of contracts for spot gas, driving up prices by simultaneously increasing demand in the marketplace and making other traders think that there was some fundamental factor that favored higher prices. Enron settled CFTC charges by agreeing to pay a $35 million fine in 2004.

Ten energy companies have paid a total of $180 million in fines to settle CFTC charges that they manipulated natural gas prices in 2001 and 2002 by providing false data about supply levels to Platts, a leading source of information on energy market conditions. The affected Platts reports sent false signals to other market participants that supplies were significantly tighter than expected, and prices rose (sharply, but briefly) as a result.

Enron and a number of other firms have admitted to "gaming" the marketing system for electrical power in California in 2000, exacerbating price increases and shortages. The strategies included deceptive reporting of energy supplies on hand (to create the impression of shortages to drive up prices), disguising the source of electricity (to take advantage of variable pricing for in-state and out-of-state power), and in some cases actually closing power plants during times of tight supplies to drive up prices. Numerous firms and traders faced civil and criminal charges as a result of these manipulations.

Enron and other energy dealers engaged in widespread "wash" or "round-trip" trading of energy derivatives. Such trades essentially consist of two firms buying and selling identical contracts simultaneously, so that the net economic effect is zero. These fictitious trades served two purposes: (1) to create the impression that the OTC derivatives market was deep and liquid (to boost confidence in the market and encourage real trading) and (2) to create fictitious revenues that could be reported on the firms' financial statements, to disguise their true financial condition.

In August 2006, the Amaranth hedge fund lost $2 billion in natural gas derivatives, and liquidated its entire $8 billion portfolio. A June 2007 staff report by the Senate Permanent Subcommittee on Investigations ("Excessive Speculation in the Natural Gas Market") found that the fund's collapse triggered a steep, unexpected decline in prices, and that Amaranth's large positions had caused significant price movements in the months before it failed. The report concludes that Amaranth was able to evade limits on the size of speculative positions (a key feature of the futures exchanges' anti-manipulation program) by shifting its trading from Nymex to exempt and unregulated markets.

Legislative Proposals on Derivatives Regulation

Since Enron, the regulatory status of OTC energy derivatives has been much debated. In the 108th Congress, the Senate twice voted down proposals to increase the regulatory authority of the CFTC and the Federal Energy Regulatory Commission (FERC) over manipulative trading in energy markets, and to impose various reporting, registration, and record keeping requirements on exempt and OTC energy derivatives markets. These proposals were offered as amendments to a broad energy policy bill (S.Amdt. 876 to S. 14) and to an agriculture appropriations bill (S.Amdt. 2083 to H.R. 2673). Similar legislation was introduced in the 109th Congress (H.R. 1638 and S. 509).

In the 110th Congress, H.R. 594 would enhance the CFTC's authority over the OTC energy market and require reporting of trade data necessary to prevent price manipulation. H.R. 3009 would impose reporting requirements on certain natural gas traders. H.R. 4066, S. 577, and S. 2058 would require the reporting of large positions in energy commodities by traders in the OTC market and on foreign futures exchanges that are accessible via terminals located in the United States. S. 2058 and H.R. 4066 authorize the CFTC to establish core principles for exempt commercial markets like ICE, which would require them to monitor and enforce rules against manipulation and excessive speculation.

In December 2007, the House Agriculture Committee marked up and approved an unnumbered bill to reauthorize the CFTC. It would create a new regulatory regime for exempt commercial markets, subjecting them to a number of exchange-like regulations. If the CFTC found that exempt markets played a significant role in setting energy prices, they would be required to register with the CFTC and maintain and enforce rules against manipulation, fraud, and excessive speculation. Identical language was added to the version of the Farm Bill (H.R. 2419) that passed the Senate on December 14, 2007.

To supporters of such legislation, the Enron scandal, the California electricity crisis, the Amaranth collapse, and other episodes of manipulation reveal a dangerous gap in regulation. They seek to fill the gap with enhanced CFTC or FERC enforcement authority, stiffer penalties for manipulation, enhanced regulation and self-regulation of exempt commercial markets, or new disclosure requirements for market participants.

Opponents argue that new legislation is unnecessary because regulators already have the enforcement tools they need to pursue fraud and manipulation. The consistent view of the CFTC and the President's Working Group on Financial Markets, expressed in testimony and written statements, has been that the rash of manipulations by Enron and other firms was an aberration that has been corrected by vigorous enforcement actions.

A key issue is whether the exempt status of OTC energy derivatives creates opportunities for manipulation. The charges brought by the CFTC, many of them involving several firms or traders acting in concert, suggest that manipulation is not a rare occurrence in energy markets. However, it is controversial whether manipulation (on the scale of what has been detected so far) has had a major impact on consumer prices. (An exception would be the California electricity case, but many believe that the half-deregulated market created in California was flawed and invited "gaming" of the system.)

It is worth noting that the OTC dealers like Enron and Dynegy — whose business was destroyed by scandal — have been replaced as market leaders not by other energy firms, but by financial institutions such as Morgan Stanley, Goldman Sachs, and ABN Amro. In addition, there has been growing use of clearing house mechanisms in the OTC market, providing another layer of market self-regulation.[2] A number of private firms, such as Optionable and ICE, have created electronic trading platforms to support transactions in both exchange and OTC markets, making OTC prices more transparent. Market forces, in other words, have swept away the OTC market that was evolving at the time of the Enron scandal. Of course, this change has not made energy prices more stable.

A second policy concern is that unregulated derivatives markets constitute a web of financial obligations that is invisible to regulators. If a major dealer defaulted, energy producers and users who had purchased derivative contracts to shield them from unfavorable price volatility could suddenly face higher than anticipated costs. In extreme cases, the failed dealers' trading partners could themselves default. The possibility of such a chain reaction is called systemic risk. However, Enron's failure had little impact on cash energy markets, despite the fact that it was the leader in the OTC energy market. As a result, there is no consensus as to the seriousness of the threat of systemic collapse, nor as to whether disclosure requirements and other regulation of OTC energy markets would make a crisis less likely to occur or allow regulators to deal with one more easily.

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[2] A clearing house, which guarantees payment on derivatives contracts, has an incentive to prevent manipulation and artificial price volatility, which increase the likelihood of customer default.

Order Code RS21401
Updated June 9, 2008

CRS Report for Congress

Regulation of Energy Derivatives

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Summary

After the collapse of Enron Corp. in late 2001, that company's activities came under intense scrutiny. Much of its business consisted of trading financial contracts whose value was derived from changes in energy prices. Enron's derivatives trading was largely "over-the-counter" (OTC) and unregulated: little information about transactions was available. Trading in energy derivatives rebounded after a post-Enron slump, and much of the market remains unregulated. This "regulatory gap" strikes some observers as dangerous for two reasons. First, the absence of government oversight may facilitate abusive trading or price manipulation. A June 2007 report by the Senate Permanent Subcommittee on Investigations concluded that excessive speculation by the Amaranth hedge fund, which failed in 2006, had distorted natural gas prices. Second, the failure of a large derivatives dealer could conceivably trigger disruptions of supplies and prices in physical energy markets (though the effect was minor in the Enron case).

A number of bills before the 110th Congress would give the Commodity Futures Trading Commission (CFTC) enhanced authority to regulate certain energy trades on markets other than the regulated futures exchanges. H.R. 2419 (the Farm Bill), enacted as P.L. 110-234 on May 22, 2008, over the President's veto, will impose exchange-like regulations on electronic over-the-counter markets that play a significant role in setting energy prices. This report summarizes energy derivatives regulation and proposed legislation. It will be updated as developments warrant.

Energy derivatives — financial contracts whose value is linked to changes in the price of some energy product — are traded in several kinds of markets: the futures exchanges and the off-exchange, or over-the-counter market. The New York Mercantile Exchange (Nymex) is the leading U.S. market for futures contracts based on prices of crude oil, natural gas, heating oil, and gasoline. Futures exchanges — called "designated contract markets" — are regulated by the Commodity Futures Trading Commission (CFTC) under the Commodity Exchange Act (CEA). The CEA imposes a range of mandates on the exchanges (and on futures industry personnel) regarding record keeping (including an audit trail for all trades), registration requirements, market surveillance, financial standards, sales practices, handling of customer funds, and so on.

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The CFTC issued a swaps exemption in 1989, holding that the CEA gave it authority to regulate swaps, but that it would not do so as long as they differed from futures contracts in certain enumerated respects. In 1992, Congress gave the CFTC additional authority to exempt OTC contracts (P.L. 102-546). In response, the CFTC modified the 1989 swaps exemption in 1993, and also issued a specific exemption for OTC derivatives based on energy products.[1] Under the 1993 exemption, OTC energy derivatives would not be regulated if all trading was between principals whose business involved the physical energy commodities underlying the derivatives, if all contracts were negotiated as to their material terms (unlike futures contracts, where terms are standardized), and if all contracts were held to maturity (rather than traded rapidly, as futures are).

This exemption was a matter of regulation, not statute. In May 1998, the CFTC issued a "concept release" that indicated that it was considering the possibility of extending features of exchange regulation to the OTC market. The release solicited comments on whether regulation of OTC derivatives should be modified in light of developments in the marketplace. Among the questions were whether the existing prohibitions on fraud and manipulation were sufficient to protect the public, and whether the CFTC should consider additional terms and conditions relating to registration, capital, internal controls, sales practices, record keeping, or reporting.

The concept release drew strong opposition from the swaps industry and from other regulators, especially the Federal Reserve. In December 1998, Congress included in the Omnibus Appropriations Act (P.L. 105-277) a provision directing the CFTC not to propose or issue any new regulations affecting swap contracts before March 31, 1999. In November 1999, the President's Working Group on Financial Markets issued a report entitled "Over-the-Counter Derivatives Markets and the Commodity Exchange Act." The report recommended that, to remove uncertainty about the legal and regulatory status of the OTC market, bilateral transactions between sophisticated parties that do not involve physical commodities with finite supplies should be excluded from the Commodity Exchange Act; that is, the CFTC should have no jurisdiction. While the Working Group's report made a distinction between financial commodities and those with finite supplies, and suggested that continuing CEA jurisdiction was appropriate for the latter, the report did *not* recommend that the CFTC should rescind its exemption of OTC energy derivatives. In other words, the Working Group saw no immediate problem with the unregulated status of OTC markets in energy derivatives.

In 2000, Congress passed the Commodity Futures Modernization Act of 2000 (P.L. 106-554, H.R. 5660). That legislation established three classes of commodities. First, financial variables (interest rates, stock indexes, currencies, etc.) are defined as "excluded commodities," and OTC contracts based on these are not subject to the CEA (provided actually closing power plants during times of tight supplies to drive up prices. Numerous firms and traders faced civil and criminal charges as a result of these manipulations.

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[1] "Exemption for Certain Products Involving Energy Products," *Federal Register*, vol. 58, April 20, 1993, p. 21286.

In August 2006, the Amaranth hedge fund lost $2 billion in natural gas derivatives, and liquidated its entire $8 billion portfolio. A June 2007 staff report by the Senate Permanent Subcommittee on Investigations ("Excessive Speculation in the Natural Gas Market") found that the fund's collapse triggered a steep, unexpected decline in prices, and that Amaranth's large positions had caused significant price movements in the months before it failed. The report concludes that Amaranth was able to evade limits on the size of speculative positions (a key feature of the futures exchanges' anti-manipulation program) by shifting its trading from Nymex to exempt and unregulated markets.

As energy (and agricultural) commodity prices reached record highs in 2008, there was concern that financial speculators were driving prices up to levels not justified by fundamentals of supply and demand. It is common to speak of a "speculative premium," or a "bubble," in the price of oil, but there is no sure methodology for determining what a commodity price "ought to be" based on the fundamentals. Some analysts believe the price of oil is headed higher; others think a sharp fall is possible.

Legislative Proposals on Derivatives Regulation

Since Enron, the regulatory status of OTC energy derivatives has been much debated. In the 110th Congress, H.R. 594 would enhance the CFTC's authority over the OTC energy market and require reporting of trade data necessary to prevent price manipulation. H.R. 3009 would impose reporting requirements on certain natural gas traders. H.R. 4066, S. 577, S. 2058, and S. 2991 would require the reporting of large positions in energy commodities by traders in the OTC market and on foreign futures exchanges that are accessible via terminals located in the United States. S. 2058 and H.R. 4066 authorize the CFTC to establish core principles for exempt commercial markets like ICE, which would require them to monitor and enforce rules against manipulation and excessive speculation.

On May 22, 2008, Congress enacted the farm bill (H.R. 2419; P.L. 110-234) over the President's veto. Title XIII included provisions reauthorizing the CFTC and creates a new regulatory regime for certain OTC energy derivatives markets, subjecting them to a number of exchange-like regulations. The provisions apply to "electronic trading facilities" — markets where multiple buyers and sellers are able to post orders and execute transactions over an electronic network. If the CFTC determines that these markets, currently exempt from most regulation, play a significant role in setting energy prices, they will be required to register with the CFTC and comply with several regulatory core principles aimed at curbing manipulation and excessive speculation (including the establishment and enforcement of position limits). They will be required to publish and/or report to the CFTC information relating to prices, trading volume, and size of positions held by speculators and hedgers.

These new regulatory requirements apply only to electronic markets that have come to resemble the regulated futures exchanges. Bilateral OTC derivative contracts between two principals (e.g., between a swap dealer and an institutional investor), that are not

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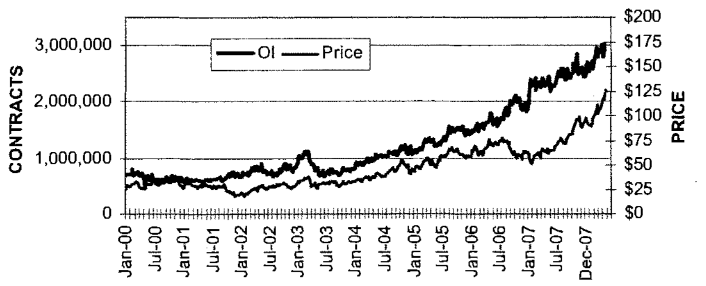
Monday, May 12, 2008

Question: How much impact has speculation had on crude oil prices?

THE GROWTH IN NYMEX TRADE:

As shown in the following chart, the uptrend in crude oil prices over the past five years has been supported by rising open interest in combined futures and options open interest. Between September 30, 2003 and May 6, 2008, open interest has grown from 714,422 contracts to a record 3,035,996 contracts representing more than 3.0 billion barrels of crude oil. While for every contract bought there is one sold, the uptrend in price suggests that the buying has been more urgent and that the buyers have been the price makers, while the more passive scale-up sellers can be considered the price takers. We also note that the 425% rise in open interest over this period has greatly exceeded the corresponding growth in the physical market of some 8.5% over that same span.



NYMEX TOTAL CRUDE OIL OPEN INTEREST
Vs. Nearby NYMEX Futures

SOURCES: CFTC FUTURES AND OPTIONS COMBINED, CQG

The CFTC *Commitments of Traders Report* provides a breakdown of this combined futures and options open interest into three broad categories of trade: commercial traders who use the market primarily to hedge their risk on obligations in the physical market, reportable non-commercial traders who are typically speculative fund managers, and small non-reportable traders who hold relatively small positions. In theory, the reportable non-commercial category would show the activity of "the funds." However, in practice, the lines between these categories are sufficiently blurry that the CFTC has introduced a specific fund report on a trial basis for some of the agricultural markets in order to make fund activity more transparent.

As a specific example of the blurring between these three categories that may arise over time, we note the case of an investment bank operating either a traditional commodity index fund or an exchange traded fund (ETF). The investor in such a product profits solely on price appreciation, so this is pretty clearly a speculative position, at least in common parlance. But within the CFTC categories, the investment bank's long position may well be considered a commercial hedge of the bank's obligation to the investor.

In addition to questions of classification between the three broad CFTC classifications of traders, we note that many market participants typically classified as commercial "hedgers" are not necessarily running a flat book in the current market environment. To the extent that they may be carrying unhedged inventory or have accumulated a long position in the market in order to either benefit or protect themselves from higher prices, these firms may also be considered to be speculating – they benefit from a further price rise but may be vulnerable to a price decline.

The larger issue here, is that while the price action and the total volume and open interest data for the market can be determined with precision, there really is no data on the motivations of the various market participants. Moreover, we note that the price action itself is an accurate reflection of the flows of buying and selling in and out of the market, but this reflects neither a democratic "one-voter-per-trader" system nor a method of determining "who's right about the fundamentals" at least in the near term. In other words, a larger trader with a mistaken view of the fundamentals can have a larger impact on prices than a small trader with even perfect knowledge of the fundamental conditions of the market might have.

Given the known imperfections of the current system of categorizing open interest, we think the total open interest figures may be the best indication of the extent of speculation of all kinds in the current crude oil market. Opinions will vary as to whether the expansion in open interest rises to meet the criteria to be termed a speculative bubble, but we note that the crude oil market does seem to match many of the characteristics described by Yale economist Robert Shiller in his book *Irrational Exuberance*:

> Irrational exuberance is the psychological basis of a speculative bubble. I define a speculative bubble as a situation in which the news of price increases spurs investor enthusiasm, which spreads by psychological contagion from person to person, in the process amplifying stories that might justify the price increases and bringing in a larger and larger class of investors, who, despite doubts about the real value of an investment, are drawn to it partly through envy of others' successes and partly through a gambler's excitement.

Regardless of whether this definition has been met in all respects, because of the rapid growth in the futures and options market as measured by its open interest, we think it is clear that the trading activity in crude oil has become more dominant relative to the underlying physical market than it has been in the past. These trading flows have the potential, at least in the short run, of either ignoring fundamental shifts in the market or exaggerating them. Over the long run, since speculators or investors only buy so that they may sell at a later time their activity may not have an impact on the longer-term equilibrium price for oil. However, in our view, their intermediate-term flows into and out of the market can drive values further from a sustainable price level than in the past, in effect putting prices on a longer leash. And as long as the open interest is still rising, that leash is still growing longer.

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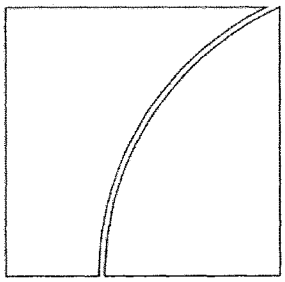
BANK FOR INTERNATIONAL SETTLEMENTS

Monetary and Economic Department



OTC derivatives market activity in the second half of 2007

May 2008

Table 19: Amounts outstanding of over-the-counter (OTC) derivatives

By risk category and instrument

In billions of US dollars

	Notional amounts outstanding					Gross market values				
Risk Category / Instrument	**Dec 2005**	**Jun 2006**	**Dec 2006**	**Jun 2007**	**Dec 2007**	**Dec 2005**	**Jun 2006**	**Dec 2006**	**Jun 2007**	**Dec 2007**
Total contracts	**297,666**	**370,178**	**414,845**	**516,407**	**596,004**	**9,748**	**9,949**	**9,691**	**11,140**	**14,522**
Foreign exchange contracts	**31,360**	**38,127**	**40,271**	**48,645**	**56,238**	**997**	**1,136**	**1,266**	**1,345**	**1,807**
Forwards and forex swaps	15,873	19,407	19,882	24,530	29,144	406	436	469	492	675
Currency swaps	8,504	9,696	10,792	12,312	14,347	453	535	601	619	817
Options	6,984	9,024	9,597	11,804	12,748	138	165	196	235	315
Interest rate contracts	**211,970**	**262,526**	**291,582**	**347,312**	**393,138**	**5,397**	**5,445**	**4,826**	**6,063**	**7,177**
Forward rate agreements	14,269	18,117	18,668	22,809	26,599	22	25	32	43	41
Interest rate swaps	169,106	207,588	229,693	272,216	309,588	4,778	4,840	4,163	5,321	6,183
Options	28,596	36,821	43,221	52,288	56,951	597	580	631	700	953
Equity-linked contracts	**5,793**	**6,782**	**7,488**	**8,590**	**8,509**	**582**	**671**	**853**	**1,116**	**1,142**
Forwards and swaps	1,177	1,430	1,767	2,470	2,233	112	147	166	240	239
Options	4,617	5,351	5,720	6,119	6,276	470	523	686	876	903
Commodity contracts	**5,434**	**6,394**	**7,115**	**7,567**	**9,000**	**871**	**718**	**667**	**636**	**753**
Gold	334	456	640	426	595	51	77	56	47	70
Other commodities	5,100	5,938	6,475	7,141	8,405	820	641	611	589	683
Forwards and swaps	1,909	2,188	2,813	3,447	5,629					
Options	3,191	3,750	3,663	3,694	2,776					
Credit default swaps	**13,908**	**20,352**	**28,650**	**42,580**	**57,894**	**243**	**294**	**470**	**721**	**2,002**
Single-name instruments	10,432	13,873	17,879	24,239	32,246	171	186	278	406	1,143
Multi-name instruments	3,476	6,479	10,771	18,341	25,648	71	109	192	315	859
Unallocated	**29,199**	**35,997**	**39,740**	**61,713**	**71,225**	**1,659**	**1,685**	**1,609**	**1,259**	**1,642**
Memorandum item:										
Gross Credit Exposure						1,900	2,032	2,036	2,672	3,256

Table 20A: Amounts outstanding of OTC foreign exchange derivatives

By instrument and counterparty

In billions of US dollars

	Notional amounts outstanding					Gross market values				
Instrument / counterparty	**Dec 2005**	**Jun 2006**	**Dec 2006**	**Jun 2007**	**Dec 2007**	**Dec 2005**	**Jun 2006**	**Dec 2006**	**Jun 2007**	**Dec 2007**
Total contracts	**31,360**	**38,127**	**40,271**	**48,645**	**56,238**	**997**	**1,136**	**1,266**	**1,345**	**1,807**
reporting dealers	12,165	15,306	15,532	19,173	21,334	323	368	438	455	594
other financial institutions	12,721	15,123	16,023	19,144	24,154	412	471	521	557	801
non-financial customers	6,474	7,698	8,716	10,329	10,751	261	297	307	333	412
Outright forwards and foreign exchange swaps	**15,873**	**19,407**	**19,882**	**24,530**	**29,144**	**406**	**436**	**469**	**492**	**675**
reporting dealers	5,713	7,301	6,914	8,800	9,899	154	157	173	190	228
other financial institutions	6,564	7,758	8,206	10,010	12,970	155	171	186	185	290
non-financial customers	3,596	4,347	4,763	5,720	6,275	97	108	109	117	156
Currency swaps	**8,504**	**9,696**	**10,792**	**12,312**	**14,347**	**453**	**535**	**601**	**619**	**817**
reporting dealers	3,268	3,770	4,121	4,909	5,487	108	137	163	155	215
other financial institutions	3,669	4,247	4,594	5,262	6,595	211	246	277	291	404
non-financial customers	1,567	1,679	2,077	2,141	2,264	133	151	161	173	198
Options	**6,984**	**9,024**	**9,597**	**11,804**	**12,748**	**138**	**165**	**196**	**235**	**315**
reporting dealers	3,184	4,234	4,498	5,464	5,948	60	74	102	111	151
other financial institutions	2,488	3,118	3,223	3,872	4,588	47	53	58	81	107
non-financial customers	1,311	1,672	1,876	2,468	2,212	31	38	36	43	57

May 5, 2008

Global: Energy: Oil

$100 oil reality, part 2: Has the super-spike end game begun?

"Super-spike" end game may be in sight

We believe the current energy crisis may be coming to a head, as a lack of adequate supply growth is becoming apparent and resulting in needed demand rationing in the OECD areas in particular the United States. The possibility of $150-$200 per barrel seems increasingly likely over the next 6-24 months, though predicting the ultimate peak in oil prices as well as the remaining duration of the upcycle remains a major uncertainty.

Raising commodity price forecasts

We are raising our 2008-2011 WTI spot oil price forecasts to $108/$110/$120/$120 per bbl from $96/$105/$110/$110 per bbl, respectively. We see risk to our 2008 and 2009 forecasts as distinctly to the upside. Effectively, we are still building in a path of moderate increases from recent levels but a longer duration in assuming the cycle continues through 2010. An alternative price path for 2008-2011 might well be $125/$200/$150/$75 per bbl.

Bullish most energy sectors plus gold

We remain broadly bullish on most energy sub-sectors in the Americas, with our current favorites the integrated oils, E&Ps, and pipelines (all Attractive). We also see the gold producers as benefiting from an "end of the world" trade. We are Neutral on oil services/drillers, though would be looking to add on a pullback. We have lowered our coverage view on the refiners to Neutral, though are willing to add to our two favorites—Valero and Frontier—at current levels.

Best buy ideas (Americas)

Our Conviction Buy rated favorite stocks include ConocoPhillips (integrated oils), Cabot Oil & Gas (E&P), Halliburton (oil services), and Valero Energy (refiners). Our favorite pipeline is El Paso and our favorite gold producer is Barrick Gold (both Buy rated).

Best sell ideas (Americas)

Our least favorite stocks are the biofuels companies Aventine Renewable Energy, Pacific Ethanol, and VeraSun Energy (all Sell rated).

RELATED RESEARCH

Global: Energy: "190 projects to change the world": April 25, 2008.

Global: Energy: Oil: "$100 oil reality: Super-spike phase 2 ushers in period of chronically high and rising prices": March 6, 2008.

Global: Energy: Oil: "The next leg up for oil markets—Still searching for demand destruction tipping point": September 14, 2007.

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Table of contents

$100 oil reality, part 2: Has the super-spike end game begun? 3

"Super-spike" end game may be in early stages of playing out 5

Comments on commodity speculators and proposed solutions to the energy crisis 11

Favorite sectors (Americas): Integrated oils, E&Ps, pipelines, and gold 14

Disclosures 17

The prices in the body of this report are based on the market close of May 2, 2008.

Exhibit 1: Goldman Sachs Global Investment Research: Global energy equity research team

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Amit Mody
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European Integrated Oils
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Anton Sychev

Oil Services
Henry Tarr
Daniel Brook

Refiners
Henry Morris

E&P
Christopher Jost

Asia Energy - Kelvin Koh, Energy Team Leader

Asia ex-Japan, Korea, India
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Chris Shiu
Eric Jia
Fan Zhang

Korea
Kenneth Whee
Joon-Ho Lee

India
Nilesh Banerjee
Durga Dath

Taiwan
Jim Hung
Rowena Chang

Japan
Hiroyuki Sakaida
Shintaro Horinouchi

Source: Goldman Sachs Research.

$100 oil reality, part 2: Has the super-spike end game begun?

We believe the current energy crisis may be coming to a head, as a lack of adequate supply growth is becoming apparent and resulting in needed demand rationing in the OECD areas in particular the United States. Per our "super-spike" thesis, we have long believed that lackluster global oil supply growth would need to be reconciled in the United States via negative demand growth. As this reality continues to become evident, oil prices are likely to move higher. The possibility of $150-$200 per barrel seems increasingly likely over the next 6-24 months, though predicting the ultimate peak in oil prices as well as the remaining duration of the upcycle remains a major uncertainty. In our view, a gradual rally in prices is likely to be longer lasting than a sharp, sudden spike.

Given our view, we remain broadly bullish on most energy sub-sectors in the Americas (please see related notes in Europe and Asia for sector/stock views in those regions), with our current favorites the integrated oils, E&Ps, and diversified pipelines (all Attractive coverage view). We also see the gold producers (Attractive view) as benefiting from an "end of the world" trade and are buyers of the recent pullback in the sector. We are Neutral on oil services/drillers, though would be looking to add to the sector on a pullback. We have lowered our coverage view on the US refiners to Neutral, though are willing to add to our two favorites—Valero Energy and Frontier Oil—at current levels. Our Conviction Buy-rated favorites across our sub-sectors include ConocoPhillips (integrated oils), Cabot Oil & Gas (E&P), Halliburton (oil services/drillers), and Valero Energy (refining); in pipelines our Buy-rated top pick is El Paso and Barrick Gold (Buy) is our preferred gold producer. We have a Cautious view on biofuels and are Sell rated on all three ethanol companies we cover, including Aventine Renewable Energy, Pacific Ethanol, and VeraSun Energy.

Buy-rated favorite stocks (Americas)

- **Integrated oils (Attractive)**: Chevron, ConocoPhillips (Conviction Buy), and Hess
- **E&Ps (Attractive)**: Apache, Cabot Oil & Gas (Conviction Buy), Encore Acquisition, EOG Resources, Suncor Energy, Ultra Petroleum, and XTO Energy
- **Oil services/drillers (Neutral)**: Halliburton (Conviction Buy), Schlumberger, Diamond Offshore, Pride International, and Transocean
- **Pipelines (Attractive)**: El Paso and ONEOK
- **Refiners (Neutral)**: Frontier Oil and Valero Energy (Conviction Buy)
- **Gold (Attractive)**: Barrick Gold and Gold Fields

Sell-rated least favorite stocks (Americas)

- **Biofuels (Cautious)**: Aventine Renewable Energy, Pacific Ethanol, and VeraSun Energy

Key energy macro conclusions

- Crude oil prices can continue to move meaningfully higher, with $150-$200 per barrel oil a real possibility over the next 6-24 moths.

- OECD oil demand to bear the brunt of demand rationing, with the United States particularly exposed given its large energy needs and heavy weighting toward transportation fuels which have no current commercially viable substitute.
- Weak US gasoline demand likely to continue to weigh on gasoline crack spreads.
- Global power problems and resilient non-OECD demand is growth driving incremental use of diesel/gasoil as well as natural gas, which should result in global natural gas prices rising and middle distillate cracks spreads staying strong.
- Ethanol prices can rally consistent with higher gasoline prices, but ethanol crush spreads are likely to remain weak due to resulting upward pressure on corn prices.
- Gold prices can recover following recent pullback, as gold tends to benefit from the "end of the world" trade.

We believe a combination of a high absolute level and sharp rate of change in oil prices is needed to sustainably ration back demand and recreate a spare capacity cushion only after which might lower energy prices return. The $50 per barrel rise in oil prices from the mid-$60s per barrel last July to over $115 per barrel now—all during a period of weakening US economic activity—is illustrative of our point that US oil demand will likely have to stay weak if global oil markets are to stay in balance. Notably, the rise to $115 per barrel has coincided with an easing in global oil demand. However, global oil inventories remain within historic bands, suggesting demand is effectively being rationed via higher prices due to a lack of adequate supply. The unrelenting rise in long-dated oil prices we think is consistent with the notion that we are seeing constrained supply driving demand rationing, rather than "voluntary" or economically-driven demand easing that would have resulted in a bearish path for oil prices.

In terms of our official base-case price deck, we are raising our 2008-2011 WTI spot oil price forecasts to $108/$110/$120/$120 per barrel from our previous forecast of $96/$105/$110/$110 per barrel, respectively (see Exhibit 2). Effectively, we are building in a path of moderate increases from recent levels but a longer duration in assuming the cycle continues through 2010. In our view, risk to our 2008 and 2009 forecasts are distinctly to the upside. An alternative price path for 2008-2011 might well be $125/$200/$150/$75 per barrel, with the point being that prices might move appreciably higher in the earlier years than our base-case price deck only to subsequently fall back to much lower levels in the out years.

Exhibit 2: Goldman Sachs global energy equity research team's commodity price forecast changes

	Crude oil prices				Refining margins				Light-heavy, sweet-sour spreads				Natural gas	
	WTI spot oil ($/bbl)		Brent ($/bbl)		US Gulf Coast 3:2:1 ($/bbl)		US West Coast 5:3:2 ($/bbl)		WTI-WTS ($/bbl)		Maya-WTI ($/bbl)		US Henry Hub ($/MMBtu)	
	new	old	new	old	new	old	new	old	new	old	new	old	new	old
2008E:														
1Q	$98	$98	$96	$96	$8	$8	$15	$15	$4.66	$4.66	$16.78	$16.78	$8.00	$8.00
2QE	110	90	109	90	11	15	20	25	6.60	7.20	19.80	13.50	11.00	10.00
3QE	110	95	110	95	13	12	22	20	8.80	7.60	16.50	14.25	11.25	11.00
4QE	115	105	115	100	8	9	17	15	9.20	8.00	17.25	15.00	12.00	1.00
Year	$108	$96	$108	$95	$10	$11	$19	$19	$7.32	$6.87	$17.58	$14.88	$10.56	$9.75
2009E	$110	$105	$110	$105	$12	$15	$22	$25	$8.80	$8.40	$13.75	$13.13	$11.25	$10.50
2010E	$120	$110	$120	$110	$15	$17	$27	$28	$9.60	$8.80	$12.00	$11.00	$9.50	$9.00
2011E	$120	$110	$120	$110	$15	$17	$27	$28	$9.60	$8.80	$12.00	$11.00	$8.00	$8.00
2012N	$75	$60	$75	$60	$10	$9	$16	$15	$6.00	$4.80	$13.50	$10.80	$7.00	$6.50

Source: Bloomberg, Goldman Sachs Research estimates.

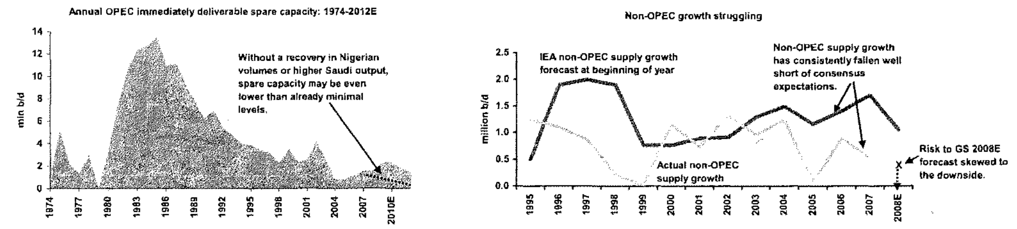
"Super-spike" end game may be in early stages of playing out

We believe we may be in the early stages of having the end game of our "super-spike" thesis play out, with crude oil prices having risen over $50 per barrel since the US economic crisis began last summer—a remarkable move and one that we think is fundamentally supported by tight global supply/demand balances. The core of our "super-spike" view has been that a lack of adequate supply growth coupled with price-insulated non-OECD demand growth will lead to a dramatic and continuous rise in oil prices ultimately leading to a sharp correction in oil demand. We have believed that a multi-year decline in global oil demand is needed in order to recreate a spare capacity cushion and bring about potentially lower energy commodity prices.

The core underlying drivers of the rise in oil prices remain firmly intact (see Exhibits 3-6):

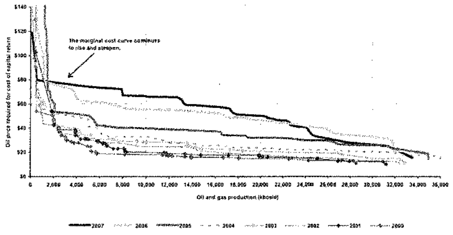
- Non-OPEC supply is struggling to grow, with notable declines being seen in Mexico and Russia showing signs of rolling over following an extended period of rapid growth. Rising industry cost structures and disappointing production growth and reserve replacement suggest non-OPEC supply trends are unlikely to improve.
- OPEC spare capacity remains at very low levels and OPEC countries are facing downward pressure on net exports due to lackluster supply growth and sharply rising internal demand. Saudi Arabia is starting to acknowledge that while it can likely increase production in the near-term, production is not going to grow infinitely into the future.
- Key oil exporting countries for the most part continue to restrict foreign investment, which will likely keep a lid on how fast supply can grow.
- Non-OECD demand growth remains healthy, in part due to economic growth but more meaningfully of late due to widespread power problems that has led to the burning of diesel and gasoil fuel in portable generators.

Exhibit 3: Both OPEC and non-OPEC supply struggling to grow, with supply risk skewed to the downside



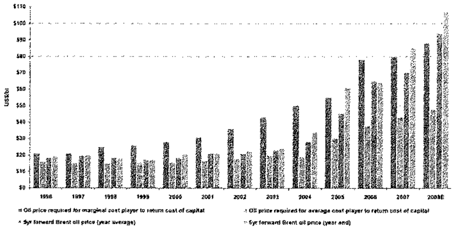
Source: IEA, Goldman Sachs Research estimates.

Exhibit 4: Upstream industry cost curve continues to rise and steepen



Source: Company reports, Goldman Sachs research estimates.

Exhibit 5: Oil price required for cost of capital return continues to rise



Source: Bloomberg, Company reports, Goldman Sachs Research estimates.

Exhibit 6: Will Saudi Arabia be more successful in meeting its production growth objectives than were the Super Majors?

Saudi Arabia production profile (mn b/d):

	2005E	2006E	2007E	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E
Crude oil production capacity	**10.00**	10.15	10.00	10.29	11.14	11.75	11.89	11.84	11.93	12.26	12.21
% growth (y-o-y)		1.5%	-1.5%	2.9%	8.3%	5.5%	1.1%	-0.4%	0.7%	2.8%	-0.4%
Net underlying decline rate		-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%
New projects:											
Haradh		0.30	0.30	0.30	0.30	0.30	0.29	0.27	0.26	0.24	0.23
Khursaniyah (AFK project)				0.38	0.50	0.50	0.50	0.50	0.48	0.45	0.43
Shaybah I				0.06	0.25	0.25	0.25	0.25	0.25	0.25	0.24
Khurais					0.60	1.20	1.20	1.20	1.20	1.20	1.14
Nuayyim					0.10	0.10	0.10	0.10	0.10	0.10	0.10
Shaybah II						0.10	0.20	0.20	0.20	0.20	0.20
Neutral Zone						0.08	0.15	0.15	0.15	0.15	0.15
Manifa I							0.15	0.30	0.30	0.30	0.30
Manifa II									0.15	0.30	0.30
Manifa III									0.15	0.30	0.30
Future projects										0.25	0.50
Total	0.00	0.30	0.30	0.74	1.75	2.53	2.84	2.97	3.23	3.75	3.88
Saudi decline rate sensivitiy:											
Crude oil production capacity	**10.00**	10.00	9.70	9.85	10.56	11.02	11.00	10.81	10.74	10.94	10.74
% growth (y-o-y)		0.0%	-3.0%	1.5%	7.3%	4.3%	-0.2%	-1.8%	-0.6%	1.8%	-1.7%
Net underlying decline rate		-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Crude oil production capacity	**10.00**	9.80	9.31	9.28	9.83	10.11	9.92	9.56	9.34	9.39	9.06
% growth (y-o-y)		-2.0%	-5.0%	-0.3%	5.9%	2.9%	-1.9%	-3.6%	-2.3%	0.5%	-3.5%
Net underlying decline rate		-5.0%	-5.0%	-5.0%	-5.0%	-5.0%	-5.0%	-5.0%	-5.0%	-5.0%	-5.0%
Crude oil production capacity	**10.00**	10.30	10.30	10.74	11.75	12.53	12.84	12.97	13.23	13.75	13.88
% growth (y-o-y)		3.0%	0.0%	4.2%	9.4%	6.6%	2.5%	1.1%	2.0%	3.9%	1.0%
Net underlying decline rate		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Saudi's ability to grow production is highly dependent on the assumed net underlying decline rate on base production, a challenge similar to the issue the Super Majors have faced.

Source: Saudi Aramco, Upstream magazine, Goldman Sachs Research estimates.

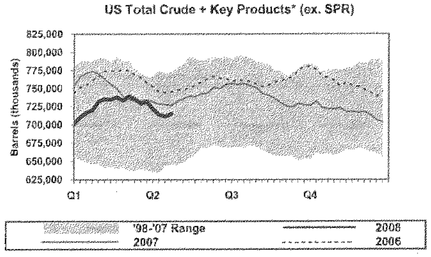
Rapid oil price rise may be signaling a greater urgency of need to ration demand

The continued lack of a meaningful supply response and the fact that oil prices have risen over $50 per barrel despite a US recession and negative US oil demand indicate that the current energy upcycle may be in the midst of a final "super-spike" phase where especially sharp price increases result in accelerated behavioral change, i.e., a needed demand collapse. The duration and ultimate magnitude of this phase remain uncertain and we note that the full process could take several years to play out and include short-term periods of downside volatility. It is our view that a combination of a high price level and rapid rate of change in prices higher are needed to sharply reduce oil demand.

Notably, despite negative US oil demand growth and lower refinery utilization, US crude oil and key product inventories remain within historic bands (see Exhibits 7-9). The fact that negative oil demand growth and lower refinery runs has not led to any meaningful build in inventories signals that world oil supplies remain tight. In fact throughout the OECD, weak demand growth has not led to a meaningful inventory build, indicating either a lack of supply growth, strong non-OECD demand growth, or non-OECD inventory builds, with a combination of the three the likely answer.

To the extent global crude oil supply growth remains lackluster, we believe a recovery in US and OECD oil demand growth is likely not possible unless non-OECD demand weakens. Given the strong secular momentum in the key non-OECD economies as well as the price-insulated nature of its energy demand, we believe OECD demand rationing is likely to continue. In essence, global oil demand cannot grow faster than global oil supply. To the extent the latter is flattish, the former will have to be the same. Afterall, one cannot demand that which does not exist.

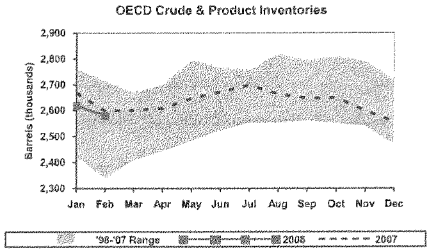
Exhibit 7: US crude and key product inventories remain in check



* key products include motor gasoline, middle distillates, and residual fuel oil

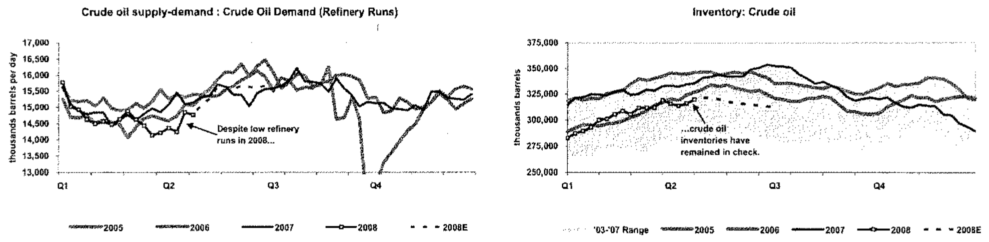
Source: DOE, Goldman Sachs Research.

Exhibit 8: OECD crude and product inventories also look normal



Source: IEA, Goldman Sachs Research.

Exhibit 9: Despite low US refinery runs and negative US oil demand growth, US crude inventory levels are actually lower versus last year



Source: DOE, Goldman Sachs Research estimates.

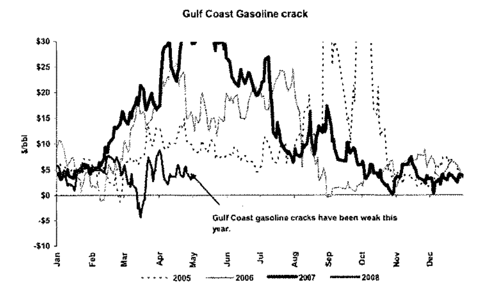
US gasoline no longer leading oil markets—a dramatic change with meaningful implications

The combination of sustained weak US gasoline markets and strong crude oil prices is unprecedented. The health of the US gasoline consumer has historically led oil markets up or down. This has not been the case in 2008, as gasoline, at least in the short-run, has traded more like an annoying by-product of crude than as its core fundamental driver as has historically been the case (see Exhibits 10 and 12). Weakness in US gasoline margins is not the surprise, given a US recession that is weakening gasoline demand and rapid growth in ethanol capacity that is extending gasoline supply. The surprise is that the weakness not only has not mattered to crude oil markets, but if anything, is helping to keep oil supply/demand in balance.

Strength in middle distillate cracks despite weak US gasoline cracks highlight shift to non-OECD

While gasoline cracks have been weak, middle distillate crack spreads have been exceptionally strong and have transitioned to being the core driver of crude oil prices in 2008 (see Exhibits 11 and 13). In our view, middle distillate crack spread strength is consistent with our view that global refining capacity remains tight, at least in terms of the ability to produce sufficient quantities of the middle of the demand barrel (i.e., diesel, gasoil, heating oil, jet fuel, kerosene, etc.). The strength in middle distillate cracks we attribute to resilient non-OECD demand growth as well as numerous global power problems that have led to increased usage of diesel/gasoil-fired power generators to ensure adequate energy supply. The fact that middle distillate crack spreads are strong signals tightness in global refining capacity to manufacture middle distillate products.

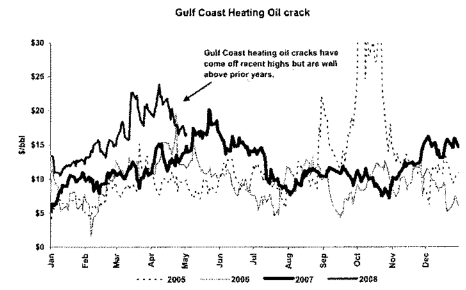
Exhibit 10: Gasoline cracks have been weak...


Gulf Coast Gasoline crack

Gulf Coast gasoline cracks have been weak this year.

Source: Bloomberg, Goldman Sachs Research.

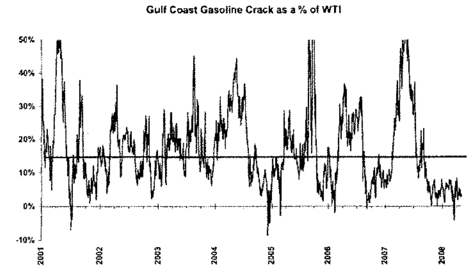
Exhibit 11: ...in sharp contrast to much healthier middle distillate cracks


Gulf Coast Heating Oil crack

Gulf Coast heating oil cracks have come off recent highs but are well above prior years.

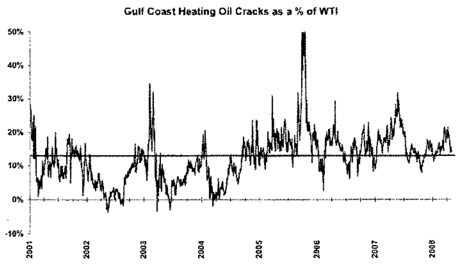
Source: Bloomberg, Goldman Sachs Research.

Exhibit 12: Gasoline cracks are weak versus crude oil


Gulf Coast Gasoline Crack as a % of WTI

Source: Bloomberg, Goldman Sachs Research.

Exhibit 13: Middle distillate cracks have strengthened versus crude oil


Gulf Coast Heating Oil Cracks as a % of WTI

Source: Bloomberg, Goldman Sachs Research.

Is there enough crude oil to satisfy both OECD and non-OECD desired demand growth?

High crude oil prices despite weak US gasoline cracks is sending the signal that global oil markets do not need or perhaps want the US gasoline consumer to recover. Negative US hydroskimming margins is confirming the signal that the US should not increase crude runs. Crude oil markets are in backwardation, signaling short-term supply/demand tightness. Finally, the long end of the oil curve has rallied significantly signaling long-term supply/demand tightness.

Modestly boosting base-case oil price deck for now, risk skewed to the upside

We are modestly bumping up our base-case 2008-2011 WTI spot oil price forecasts to $108/$110/$120/$120 per barrel from our previous forecast of $96/$105/$110/$110 per barrel, respectively (see Exhibits 14-15). In our view, risk to our 2008 and 2009 forecasts are distinctly to the upside, as oil markets may have entered the final major up phase of the current "super-spike" era. An alternative price path for 2008-2011 might well be $125/$200/$150/$75, with the point being that prices might move appreciably higher in the earlier years than our base-case price deck only to subsequently fall back to much lower levels in the out years.

We are also boosting our normalized oil price to $75 per barrel from $60 per barrel before. We continue to use 2012 as our first "normalized" year. Our normalized view continues to be based on a combination of oil prices and costs that yields a "cost of capital" return for industry overall. The specific oil price has always been of secondary importance to us. We continue to assume that in a less bullish price environment, costs will fall.

Mixed changes to refining margin forecasts: Lowering gasoline cracks, raising distillate cracks

We are slightly lowering our 2008-2011 refining margin forecasts, though the changes to the blended margins reflect disparate movements in the underlying product cracks. We are lowering our forecast for gasoline crack spreads, but raising our forecast for middle distillate cracks consistent with the above discussion. Most US refiners are disproportionately leveraged to US gasoline margins, such that the changes are generally negative to their earnings/cash flow generation. We have not made any meaningful changes to our view of light-heavy and sweet-sour crude oil spreads; we continue to believe that Canadian light-heavy crude oil spreads will be wider than Maya-WTI spreads, though the latter has been wider this year than we had previously been expecting.

Modestly raising US natural gas forecasts

We are bumping up our 2008-2010 US natural gas price forecasts to reflect higher residual fuel oil and international LNG prices and what has generally been constructive US inventory data, the most recent week notwithstanding. We continue to believe that US natural gas prices have material upside this summer, with the possibility of $12+ per MMBtu pricing. Unlike our crude oil view, we do not see the structural supply/demand imbalance, as the world is able to meaningfully grow natural gas output.

Exhibit 14: Goldman Sachs global energy equity research team's commodity price forecast changes

	Crude oil prices				Refining margins				Light-heavy, sweet-sour spreads				Natural gas	
	WTI spot oil ($/bbl)		Brent ($/bbl)		US Gulf Coast 3:2:1 ($/bbl)		US West Coast 5:3:2 ($/bbl)		WTI-WTS ($/bbl)		Maya-WTI ($/bbl)		US Henry Hub ($/MMBtu)	
	new	old	new	old	new	old	new	old	new	old	new	old	new	old
2008E:														
1Q	$98	$98	$96	$96	$8	$8	$15	$15	$4.66	$4.66	$16.78	$16.78	$8.00	$8.00
2QE	110	90	109	90	11	15	20	25	6.60	7.20	19.80	13.50	11.00	10.00
3QE	110	95	110	95	13	12	22	20	8.80	7.60	16.50	14.25	11.25	11.00
4QE	115	105	115	100	8	9	17	15	9.20	8.00	17.25	15.00	12.00	1.00
Year	$108	$96	$108	$95	$10	$11	$19	$19	$7.32	$6.87	$17.58	$14.88	$10.56	$9.75
2009E	$110	$105	$110	$105	$12	$15	$22	$25	$8.80	$8.40	$13.75	$13.13	$11.25	$10.50
2010E	$120	$110	$120	$110	$15	$17	$27	$28	$9.60	$8.80	$12.00	$11.00	$9.50	$9.00
2011E	$120	$110	$120	$110	$15	$17	$27	$28	$9.60	$8.80	$12.00	$11.00	$8.00	$8.00
2012N	$75	$60	$75	$60	$10	$9	$16	$15	$6.00	$4.80	$13.50	$10.80	$7.00	$6.50

Source: Bloomberg, Goldman Sachs Research estimates.

Exhibit 15: Key assumptions underlying WTI spot oil forecast
$/bbl, unless otherwise indicated

	WTI spot forecast	Month 1-12 backwardation/ (contango), %	Long-dated forecast
2008E	$108	2.0%	$100
2009E	$110	-5.0%	$110
2010E	$120	-3.9%	$121

Source: Goldman Sachs Research estimates.

Comments on commodity speculators and proposed solutions to the energy crisis

Commodity speculators play a critical role in balancing oil supply/demand

We believe there is a fundamental misperception among many in the oil industry, Wall Street, the media, politicians, and the general public that so-called "speculators" are driving up the oil price to supposedly unjustified levels. Unfortunately, we do not think the energy crisis will be solved by finding and punishing the big, bad speculator. In fact to the contrary, we believe commodity investors are helping to solve the energy crisis by speeding up the process of incentivizing higher capital spending on a wide range of energy projects while at the same time encouraging lower levels of demand by energy users.

Without question increased fund flow into commodities has boosted prices. The issue is whether the resulting oil price is "real" or represents speculative excess; we strongly believe the former. We note that if it is an excessive oil price, where is the excess supply? Inventory levels look normal and just about all of industry—both non-OPEC and OPEC—are badly missing production forecasts. The minimal supply growth despite what is now nine years of favorable energy market conditions is remarkable and in our view the most substantive indication that current oil prices are fundamentally justified.

The fact that tight oil supply/demand fundamentals are attracting large amounts of capital is a good thing. Higher oil prices signal to oil companies the need for greater investment. Higher oil prices also signal to consumers the need to demand less. This is basically the point of capitalism, which over the past hundred years has proven to be the superior economic and geopolitical philosophy.

The so-called commodity speculator should be applauded for speeding up the message to both oil companies and consumers that energy markets are tight. Commodity speculators also encourage venture capital and private equity firms to invest in alternative energy and other new forms of supply. During the 1990s, very little investment went into clean energy. Today, alternative energy investment is rising rapidly thanks in large part to the role of commodity investors in bidding up energy prices.

In our view, supporters of a cleaner environment should be supportive of commodity investors, as the combination of lower demand and new alternative energy investments take hold. In our view, commodity investors are helping to accelerate the speed by which the world will naturally want to burn less crude oil.

Energy policies that are not likely to work

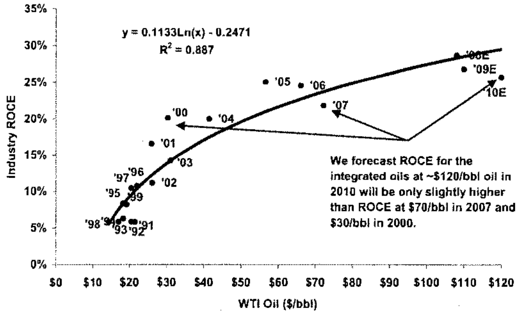
We realize politicians are in the business of being elected to office and often need to deliver messages that resonate with the public, no matter how unproductive the prescription may be. This is evident in various proposals made by all three of the leading candidates for US president, including Senator John McCain, Senator Hillary Clinton, and Senator Barack Obama.

Lower gasoline taxes. Policies that attempt to lower the retail gasoline price we think will make matters worse, as the signal that Americans need to use less energy would be muted.

Windfall profits tax on major oil companies. We appreciate the fact that Big Oil is an easy target and not particularly popular with the general public. However, several truths stand out to us: (1) current industry returns on capital of just over 20% are above historic averages, but hardly excessive (see Exhibit 16); (2) higher taxes do not stimulate additional investment to grow supply; (3) major oil companies account for a small portion of the world's energy supply and an even smaller portion of future supply growth; and (4) most major oil companies own very few of the gasoline stations in this country (including those that carry their brand) and rarely "set" the price of retail gasoline. The notion that such a tax could be passed along to consumers via some form of tax rebate again sends the wrong signal that current levels of energy use can continue.

Pressuring ExxonMobil and other big oil companies to invest in alternative energy. Beyond "feel good" sentiment, we fail to see the logic of pressuring major oil companies to invest greater amounts of capital in alternative energy. Given that crude oil is primarily a transportation fuel, the most logical area of alternative energy for major oil companies would be biofuels. Fortunately, most of the major oils have had the good sense to steer clear of corn-based ethanol, the rapid growth of which is playing a role in higher agricultural commodity prices and food riots around the world. So-called next generation biofuels we are skeptical will prove to be commercially viable anytime soon, making the level of investment by major oils a moot point. Hybrid engine battery technologies also are not a core competency for major oils. The areas of alternative energy that do appear to make sense, such as solar, wind, and nuclear energy, are all used for power generation, which is not a core business for the major oils. As such, we do not see the logic behind the campaign to pressure Exxon and other major oil companies to invest more in alternative energy.

Exhibit 16: Oil profits are not excessive: Integrated oils ROCE at $120/bbl oil in 2010E comparable to $30/bbl in 2000
Integrated oils include our North America-based super-cap and large-cap peer group



Source: Company reports, Goldman Sachs Research estimates.

There is no pain-free way to solve the energy crisis, but the end result we think will be good

Major increases in energy commodity prices have historically accelerated energy efficiency gains, with the post-spike oil demand growth rate lower than what occurred during the period leading up to higher prices. We expect that to be the case this time around as well. The best thing that could happen for transportation fuels is that the world starts to drive considerably more fuel efficient cars while also investing in improved public transportation. The incentive to increase energy efficiency is likely to accelerate environmental improvements in comparison to a world where energy prices are lower. Finally, a world that decreases its dependency on crude oil should lead to less dependency on certain governments that effectively, if not actually, support terrorism.

Favorite sectors (Americas): Integrated oils, E&Ps, pipelines, and gold

Integrated oil companies: Long-term winners

We think the major integrated oil companies have a particularly compelling risk/reward, as the group is well-exposed to higher crude oil and global natural gas prices, which will more than offset any exposure to weak US gasoline markets. Importantly, the western majors are also generally best positioned to withstand what some day will be the big leg down, given business models that have been far more focused on ensuring excess return on capital employed will be generated irrespective of the price environment. Getting the precise timing of the big move up followed by the big move down will likely prove difficult, which we think argues for owning the major oils today.

Buy-rated integrated oils: Chevron, ConocoPhillips (Conviction Buy), and Hess

E&Ps, oil services/drillers: Leveraged beneficiaries of the up portion of the cycle

During the move up to $150-$200 per barrel, we would expect the traditional leveraged beneficiaries—E&Ps and oil service/drillers—to perform well. Investors will need to be cognizant, however, that in the final big move up, the time will come when these groups should be aggressively sold. The risk of course is that prices rise dramatically and multiples compress, as investors become fearful that the peak is imminent. To some extent, fearing an imminent peak has characterized the consensus Street view for much of the upcycle. As such, we think E&Ps and oil service/drillers will rally with higher commodity prices, or at a minimum, hold up better than the broader stock market. Note, in the very near-term, we prefer to buy oil services/drillers on weakness and have a Neutral coverage view at this time.

Buy-rated E&Ps: Apache, Cabot Oil & Gas (Conviction Buy), Encore Acquisition, EOG Resources, Suncor Energy, Ultra Petroleum, and XTO Energy

Buy-rated oil services/drillers: Halliburton (Conviction Buy), Schlumberger, Diamond Offshore, Pride International, and Transocean

Refiners: Sector view lowered to Neutral, though we still like heavy oil coking refiners

The outlook for the US refining industry we no longer think is as clear cut as an outright bullish or bearish call; hence our move to a Neutral coverage view. This is a call we got very wrong, as the refiners we cover are –25% since our December 13, 2007 sector upgrade versus –5% for the S&P 500.

Our "super-spike" thesis has long considered the United States as the region where demand would need to fall most meaningfully in order for global oil supply/demand to stay in balance and that significantly higher US gasoline prices would be needed for that to occur. What we mis-analyzed was the ability for higher US gasoline prices to be entirely a function of higher crude oil prices as opposed to a combination of crude oil prices and gasoline crack spreads as was our view; historically crude oil prices and gasoline crack spreads have been strongly positively correlated (after adjusting for normal seasonality). We think the historic correlations have broken down due to: (1) higher ethanol output which has added to US gasoline supply; (2) the global power crisis and resilient non-OECD demand, which has resulted in strong middle distillate cracks and higher crude oil prices despite weak US gasoline fundamentals; and (3) disappointing crude oil supply growth. The overall result has been squeezed US gasoline margins. We still expect a rebound in gasoline crack spreads to occur from current depressed levels, especially if the ethanol RFS is lowered; however we have lowered our expectations for US gasoline crack spreads relative to prior forecasts.

With that said, refiners that can process heavy oil production and produce rising quantities of middle distillates we think can generate meaningful excess returns for shareholders. In the US, we would put Valero Energy (Conviction Buy) and Frontier Oil (Buy) in this category. The outlook is more bearish for refiners that process predominantly light-sweet crude oil and higher quantities of gasoline. We would place Sunoco and Tesoro in this group and have downgraded our view of Sunoco shares to Neutral from Buy. Tesoro remains Neutral rated. From a timing perspective, we would be willing to add to positions in Valero and Frontier now given that: (1) the US is about to enter the summer driving season; (2) expectations are already very bearish and valuations depressed; (3) there is a growing potential for the US government to lower the ethanol RFS; and (4) near-term gasoline fundamentals are showing some signs of improvement.

Buy-rated refiners: Frontier Oil and Valero Energy (Conviction Buy)

Pipelines/MLPs: Long-term beneficiaries of the need to grow North America energy infrastructure

We remain bullish on the diversified pipeline and related pipeline MLP sectors, as these groups are key beneficiaries of the need to grow and reconfigure North America energy infrastructure. Whether it is new oil pipelines from Canada's oil sands to the US Gulf Coast, new natural gas pipelines to meet growing unconventional gas production, or the new Alaska gas pipeline being proposed by BP and ConocoPhillips, diversified pipeline stocks and pipeline MLPs we cover should be major beneficiaries.

Buy-rated pipelines: El Paso and ONEOK

Biofuels: Corn ethanol not the answer and cellulosic ethanol seems likely to miss this cycle

We remain Cautious on the biofuels industry, most notably corn-based ethanol. While corn ethanol has succeeded in keeping gasoline crack spreads narrower than would otherwise likely be the case, it has done very little to change fundamentally tight global oil supply/demand balances and has played a role in sharply higher agricultural commodity prices. We believe higher expected ethanol prices will result in upward pressure on corn prices, as the market tries to balance sufficient ethanol capacity growth to meet the US Renewable Fuels Standard (RFS) with tight corn and other key agricultural product supplies. Next generation biofuels, such as cellulosic ethanol, we think are still years away from commercial viability and are likely to be late too impact the current upcycle.

Sell-rated biofuels: Aventine Renewable Energy, Pacific Ethanol, and VeraSun Energy

Gold: An "end of the world" trade that has lagged of late

Gold prices and gold equities have corrected over the past month, as investors have begun to wonder whether the US dollar still had meaningful downside after already underperforming other key currencies so significantly. We make no call on the outlook for the US dollar in this report. In our view, to the extent energy and agricultural commodity prices still have meaningful upside risk, we think gold prices and equities can rally off of recent lows. We recognize that gold does not have the strong underlying supply/demand fundamentals that various energy, base metals, and agricultural commodities have. We do find gold intriguing, though, following the recent pullback given that it historically has been a good "end of the world" trade.

Buy-rated gold producers:: Barrick Gold and Gold Fields

Reg AC

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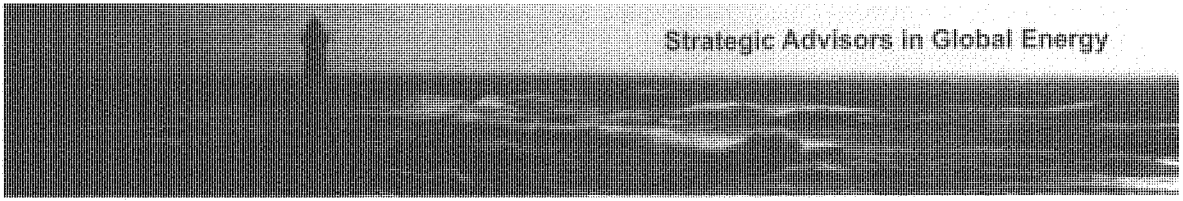


Strategic Advisors in Global Energy

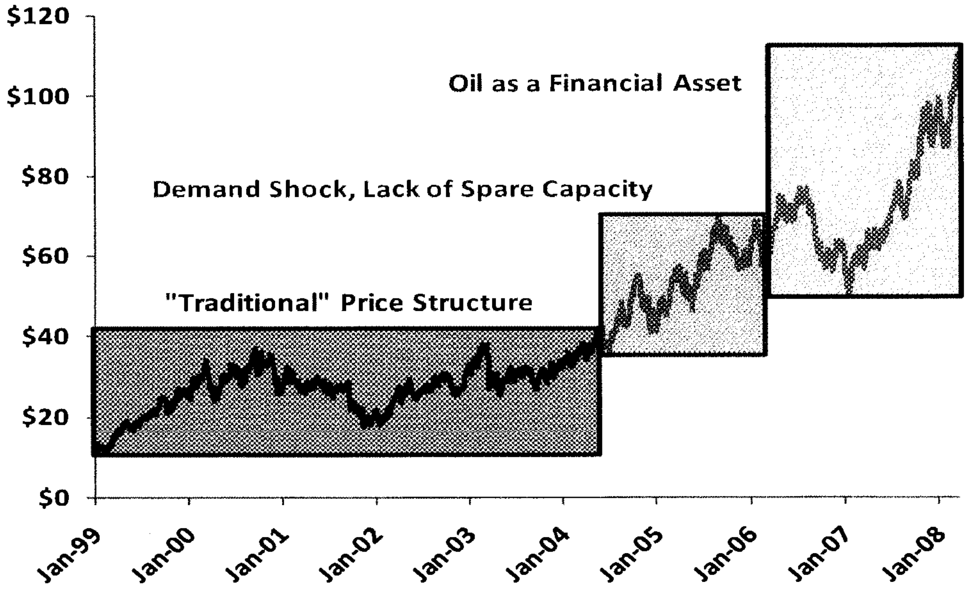
Crude Oil: Non Commercial Trends and Financial Market Dynamics

Roger Diwan, Partner
April 2008

PFC Energy

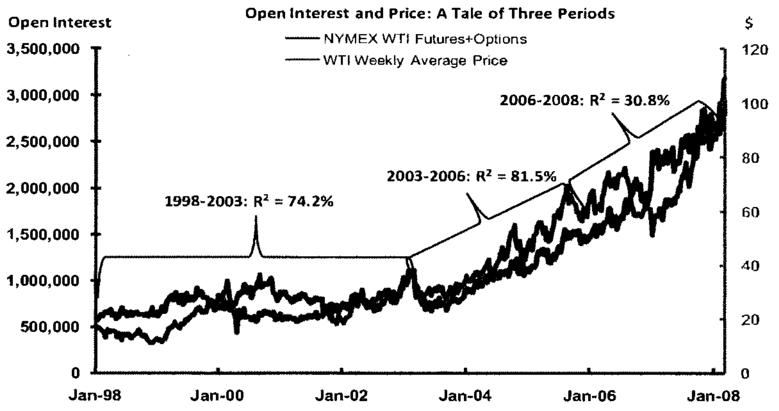
Oil Prices and Structural Trends

WTI Prompt Month Price



Open Interest and Price, a Divergence in 2006

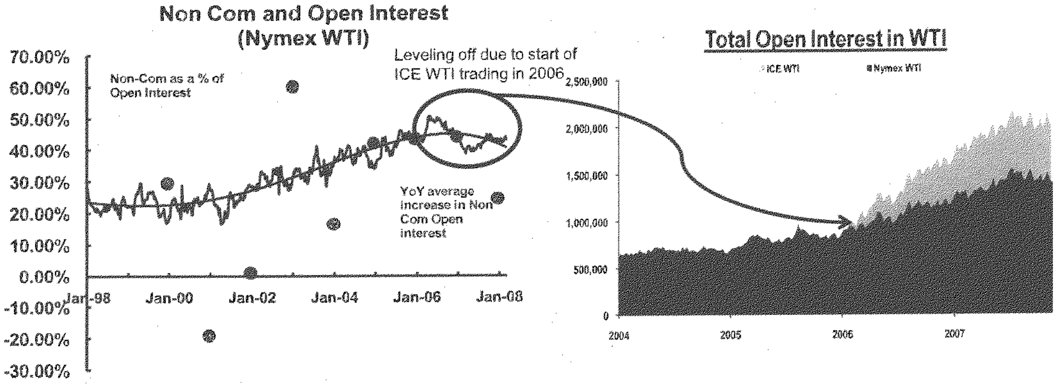
- WTI price and open interest relationship had been strong historically, looking back to 1998.
- Between 2003-2006, the correlation became even stronger as open interest increased, fueled by demand shock, a lack of spare capacity, and long-only trading activity.
- Starting in 2006, the open interest and price correlation rapidly broke down as non commercial trading picked up, bringing into the market an increasing number of financial firms playing out multi-prong trading strategies.



Open Interest and Price: A Tale of Three Periods

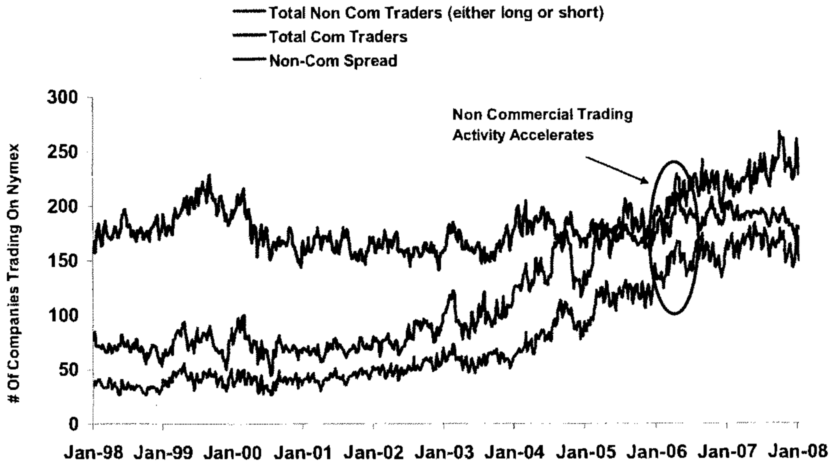
Non Commercial Trading and Open Interest

- Non commercial trading has steadily increased its share of total open interest in oil, while absolute levels of volume on year-on-year basis has also increased since 2002.
- The leveling off overall trading volume in Nymex WTI in favor of the Intercontinental Exchange (ICE) has been driven by financial funds' motive to keep trading strategies hidden from CFTC disclosure requirements.



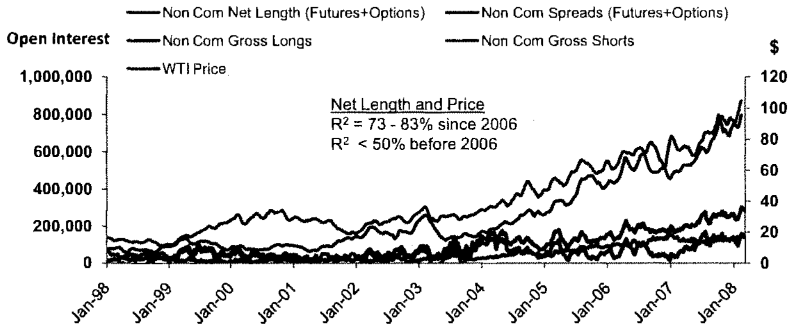
Non Commercial Trading Takes Off

- As non commercial trading accelerated, commercial activity leveled off. Non com spread positions became the dominant category for traders in publicly published CFTC data.



Spreads and Net Length: Two Categories to Watch

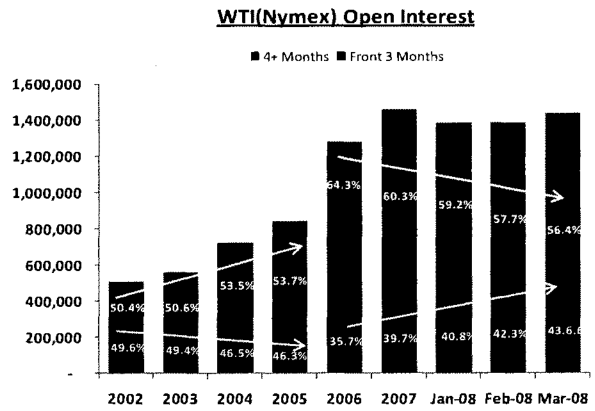
- **Even as non commercial spreads has been the dominant category of trading, non commercial net length (the difference between aggregate gross longs and gross shorts) is the trading metric that since 2006 has been best correlated with crude oil price.**



Non Commercial Activity and WTI (Nymex): Spreads Dominate, Net Length Predictive

Open Interest Levels on the Futures Curve

- **Prior to 2006, there was an incremental increase flow of funds into the back of the curve (4+ months).**
  - The 2004-6 demand shock and lack of spare capacity served to further boost this trend.
- **Since 2006, short term non commercial activity has elevated open interest volume in the front of the curve.**



One Futures Curve, Different Strategies

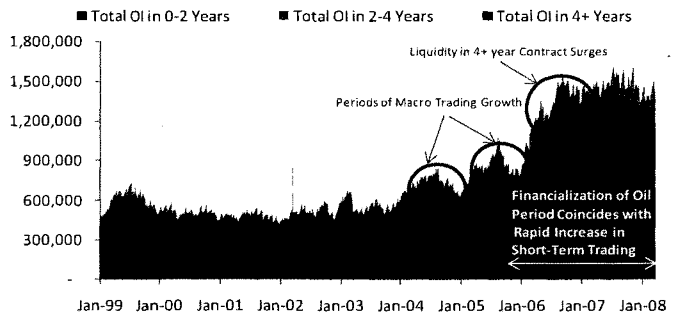
For a finer level of analysis, we have segmented out the WTI (Nymex) futures curve per the following convention:

- ***Short-Term Trading***: Futures 0-2 years
- ***Macro Trading***: Futures 2- 4 years
  - Driven by supply/demand/inventory/news
- ***"Peak Oil" Trading***: Futures 4+ Years
  - Driven by belief that max. global crude oil production will be reached within the next decade.

So, our analysis within the above framework reveals...

Segmented by Trading Strategy

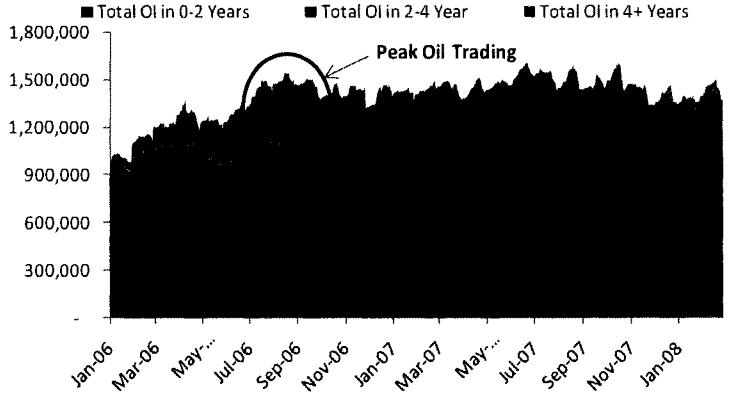
- Macro Trading had significant periods of growth in 2004 and 2005.
- Liquidity in long dated futures (4+ years) began in earnest in 2006 and peaked towards the end of the year, fizzling out from 2007 – present.
- Financialization of oil coincides with rapid increase in short-term trading between mid-2005 and present.



Changes in Total Open Interest Per Segment

The Last 2 Years of the Futures Curve

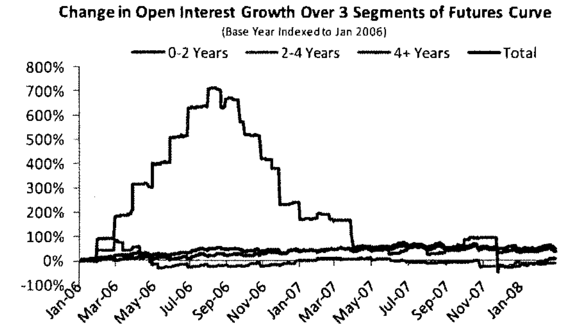
Focusing in on the period when oil started to be used as a financial asset, the popularity of "peak oil" trading stands out among the three segments.

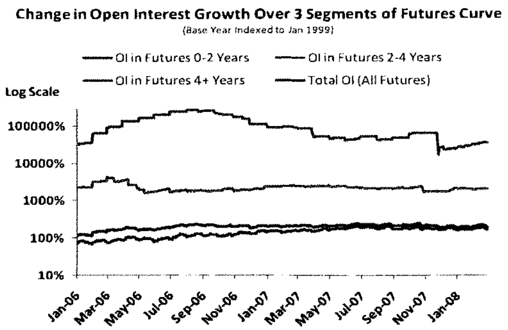


Oil as a Financial Asset:
Changes in Open Interest Over 3 Segments of Traders

Open Interest Growth Tells the Story

- Base-Year Indexed to Jan 2006, open interest shows huge growth in long dated futures contracts.
- Base-Year Indexed back to 1999, Macro and "Peak Oil" Trading are shown to have grown by several orders of magnitude faster than Short-Term Trading and overalll open interest.

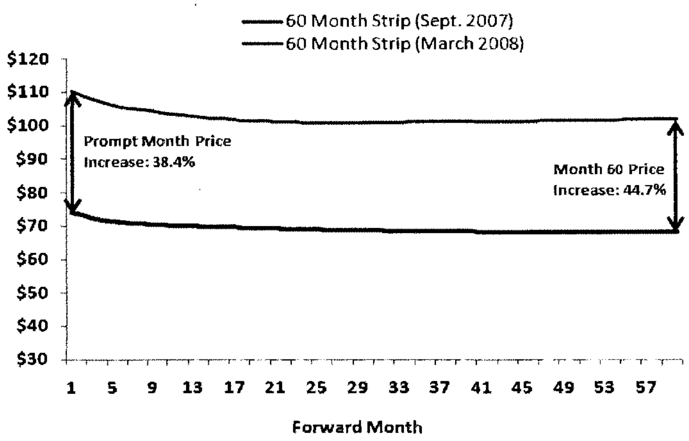

Change in Open Interest Growth Over 3 Segments of Futures Curve
(Base Year Indexed to Jan 2006)


Change in Open Interest Growth Over 3 Segments of Futures Curve
(Base Year Indexed to Jan 1999)

Price Levels in Recent Months

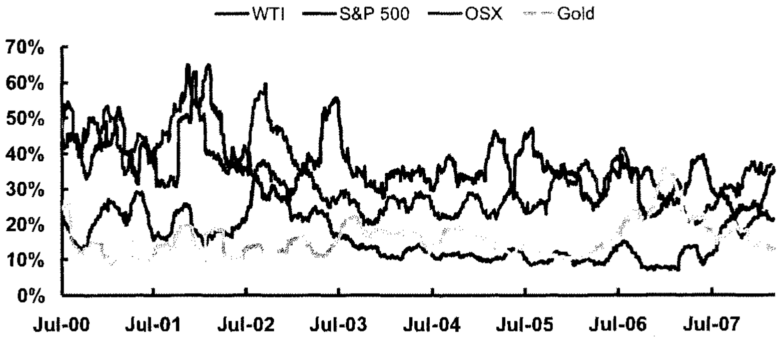
- Long-dated futures contracts have surged in recent months to record levels. On March 13, 2008, every futures contracts until December 2016 finished above $100/bbl for the first time.
- Long-dated oil futures have outperformed spot prices during the past six months. The five-year forward price has risen 44.7 per cent since September, while the spot price has risen by 38.4 per cent.

Recent Price Level Movements



Price Volatility

- Going back to 2000, oil, both as a commodity and also as a proxy of oil service companies' equity prices (OSX) has shown higher volatility than a broad equity index (S&P 500) and gold.
- This was especially true between 2003-2006 when demand shocks and supply constraints were elevating oil's price volatility.
- Since 2006 oil price volatility has somewhat lessened and the most recent data show it comparable to broader stock indices.



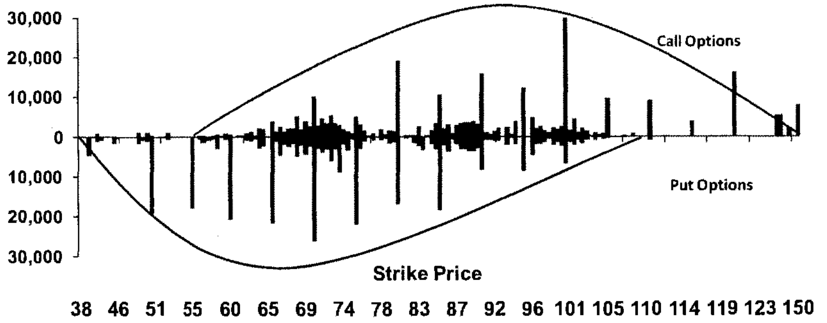
Rolling 50-Day Historical Volatility

Options Data Point to Oil Price Drop

- Looking ahead to the end of 2008 calendar year, the most recent data (as of March 28, 2008) of call and put options open interest show that the market is pointing to a significant drop in crude oil prices.
- For options with an expiry date of Dec. 2008, put volume is 18% greater than calls over a $40 – 150 strike price range. The heaviest option volume is aggregating around puts with strike prices between $60- 75, with $70 being a possible "floor" price looking ahead to Dec. 2008.

Call and Put Options Open Interest

Dec '08 Contract

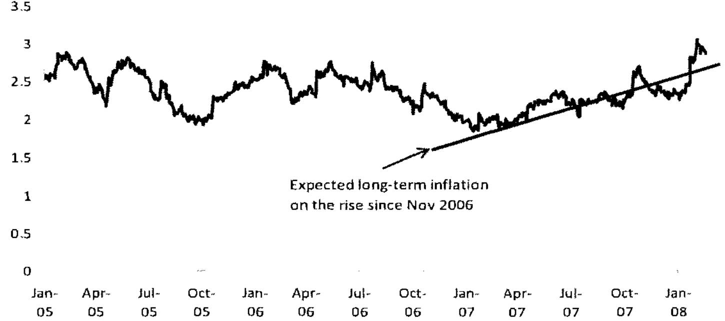


Back to the Future: Inflation Expectations Matter

- The yield spread of US Treasury Inflation-Protected Securities (TIPS) over the nominal US Treasury bond is considered a good proxy for the market's expectations of future inflation over the securities' maturity period.
- Since Nov 2006, the yield spread of 10 Year Treasury Inflation-Protected Securities (TIPS) over the nominal Treasury bond has increased 81.8%. Over the same time period, the price of WTI crude oil has increased 69.5%. But is there a correlation?

Adjusted* 10 Year TIPS Yield Spread

Expected Long-Term Inflation Steadly Growing since Nov 2006

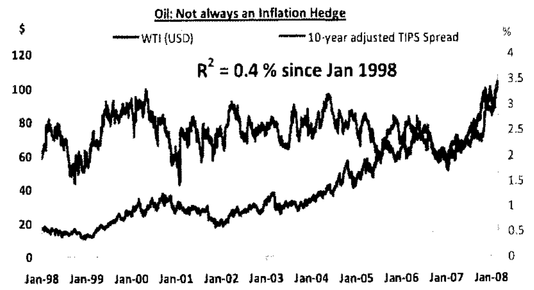


Expected long-term inflation on the rise since Nov 2006

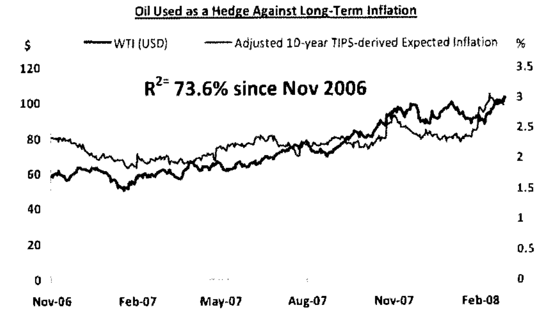
* Source: Cleveland Fed, Liquidity Adjusted Series

Oil: The New Inflation Hedge, in The Long-term

- Traditionally, a relationship between oil prices and inflation expectations has not existed…



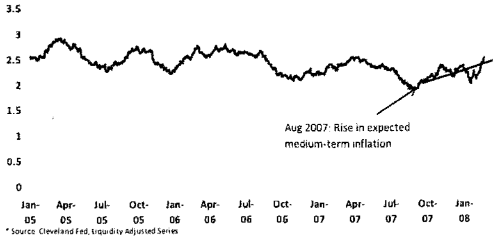
- …since Nov 2006, however, long-term inflation expectations, have started to align better with crude oil prices …



Data source: Cleveland Federal Reserve, Liquidity Adjusted Series

Medium-term Inflation Expectations

- Medium-term inflation expectations in the US has shown a similar upward trajectory since summer 2007…

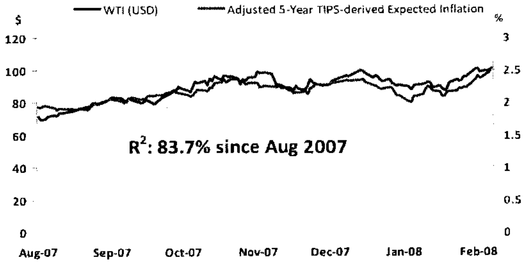


Adjusted* 5-Year TIPS Yield Spread

Expected Medium-Term Inflation on the Rise since Aug 2007

* Source: Cleveland Fed, Liquidity Adjusted Series

- …and an even greater correlation with oil emerges with inflation expectations over a 5 year time horizon.

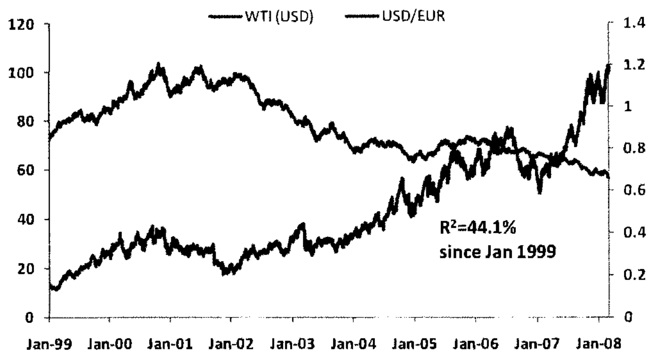


Oil as a Hedge Against Medium-Term Inflation

Data source: Cleveland Federal Reserve, Liquidity Adjusted Series

Oil Appreciates on the Back of Dollar Weakness

- Before 2007, WTI price and the US dollar were not strongly correlated.
- From 1999-2007, the coefficient of determination was only 44.1% between the USD/EUR exchange rate and WTI price.

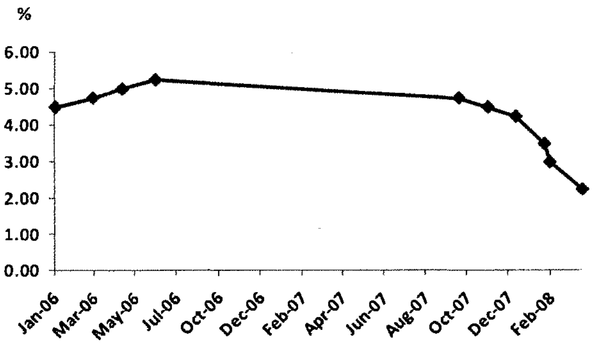


Pre-2007: USD and WTI not as strongly linked

Interest Rates' Role

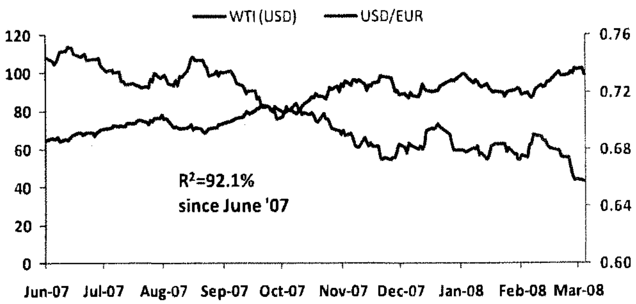
- **As the US Federal Reserve started to ease monetary policy in Sept. 2007 with a series of cuts in the short-term interest rates, dollar-denominated assets became less attractive to investors, prompting them to higher yielding assets, which weakened the dollar.**

Federal Funds Rate



Oil and Dollar Tango

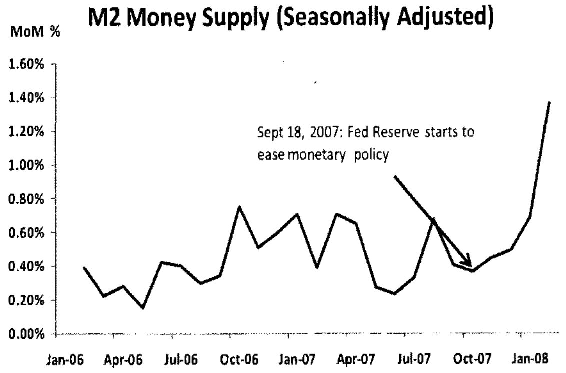
- Investors fleeing the lower-yielding dollar moved funds into oil futures, which was being viewed as a relatively higher-yielding financial instrument, buoyed by a surge of global capital flow.
- Additionally, oil futures bought and sold in dollars became more attractive to foreign investors as the dollar further weakened against such investors' home currencies.
- These financial market dynamics resulted in a dramatic alignment between dollar and oil price movements.



As the Greenback weakens, WTI ascends

Increasing Money Supply Adds a New Twist

- With credit markets still in the throes of the subprime mortgage meltdown, the Federal Reserve has been attempting to breath new life into markets by expanding its traditional lending facilities available to financial institutions.
- The mechanism underlying the new available credit facilities have been implemented using government repurchase agreements, which "sterilize" the fed's intervention and theoretically limits their impact on inflation and exchange rates.
- However, aggregate money supply has seen a sharp increase since monetary easing began last fall.
- The unintended consequence of increasing the money supply could lead to a further injection of liquidity in markets that are already flush with new capital flows, such as oil and gold.



M2 Money Supply (Seasonally Adjusted)

Sept 18, 2007: Fed Reserve starts to ease monetary policy

Source: US Federal Reserve

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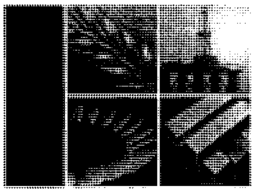
Energy Special Report

FIXED INCOME RESEARCH | COMMODITIES | THURSDAY, MAY 29, 2008



Oil Dot-com

Over the past two weeks, the crude oil forward curve has flattened. Fundamental changes cannot explain sudden, severe price or curve movements. As in the dot-com period, when "new economy" stocks became popular, a growing number of Wall Street analysts have been repeatedly raising their forecasts as oil prices have risen. These revised forecasts have been partially responsible for new investor flows, driving prompt and forward prices to perhaps unsustainable levels (Figures 1 and 2).

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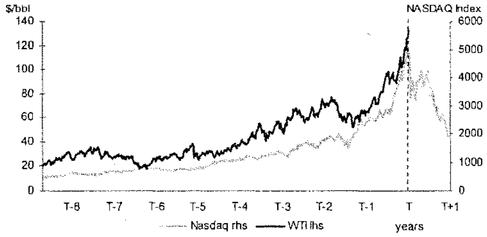
Financial flows and the contango two-step

We have been forecasting that the crude oil forward curve's persistent backwardation since last September would be followed by a move back to contango by the second quarter of this year. We had also projected a weakening of prompt prices at the start of Q2, following by strengthening through Q3. Our view was predicated on the start of a build in crude oil inventories by the end of Q1.

Yet since the start of Q2, crude oil prices (Brent) have rallied from $100.17/bbl to $132.70/bbl. The forward curve has also moved from a $9.71 backwardation extending 67 months on April 25, 2008, to a $12.47 contango going forward 140 months on May 21, 2008. By the end of last week, a one-day precipitous move brought the curve back to backwardation. What has happened to prices and why? (Figure 3)

Figure 1. Crude oil's accelerating ascension recalls 'booms' of yore



Source: Bloomberg

PLEASE SEE ANALYST CERTIFICATIONS AND IMPORTANT DISCLOSURES STARTING AFTER PAGE 10.

Figure 2. Light sweet crude quarterly oil price forecast ($, period averages)

	1Q08E	2Q08E	3Q08E	4Q08E	1Q09E	2Q09E	3Q09E	4Q09E	2008E	2009E
Brent ($ per barrel) - NEW	96.31	120.00	125.00	110.00	90.00	95.00	100.00	85.00	113.00	93.00
Revision	0.00	10.00	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00
WTI-Brent differential	1.51	1.50	1.00	-1.00	1.00	-1.00	1.00	-1.00	0.80	0.00

Source: Actuals – Bloomberg; Estimates - Lehman Brothers.

The deferred crude oil price rise is astronomic

Our forecast of a structural shift to contango was based on expectations of a persistent crude oil inventory build. We still expect this to occur globally in 2008, with demand growing only 885k b/d and global supply up by 2m b/d, making up for last year's 700k b/d global inventory draw and, furthermore, building stocks by 400k b/d. However, last week's rapid flip to contango (and back) was not driven by a perceived inventory build, nor did the front end of the curve fall as the back end rose. Rather, oil prices this past week reached all-time highs above $135/bbl, topping off a $40 run-up since the start of the year, and the back-end (2020) deferred price rose by more than $36 from May 1 to its peak last week. In our judgment, two primal factors drove the market: 1) perceptions of tightness this year and into the indefinite future and 2) momentum.

Perceived market tightness belies reality

Perceived market tightness has come from visible data: crude oil inventories have not built in the most transparent OECD markets, the US and Japan. In the US, imports have fallen by a dramatic 400k b/d on average over the past ten weeks versus the prior YTD average. By comparison, if imports continued at the prior rate of 10.01m b/d, crude stocks would be 26m bbls higher and 4m bbls off of last year's level. Meanwhile, Asian demand, especially Chinese imports and revised Indian data, makes it appear as though emerging market demand will continue relentlessly. On the supply side, non-OPEC production has continued to slide; indeed, last month Mexican output slid by a stunning 13% year-on-year in tandem with a persistent fall in Russian and North Sea flows, and the market continues to discount Saudi production increments and the rise in Saudi surplus capacity.

Projecting past tightness on the future is a pitfall of recent analyst forecast revisions

In an environment in which demand is bumping against capacity constraints, commercial inventories fail to grow, and surplus production capacities are significantly eroded, prices need to grow exponentially to balance the market. This theoretical underpinning of higher prices is graphically demonstrated in Figure 3. The market perceives that this condition, which was prevalent in 2002-2007, still dominates the market, and it provides the basis on which many analysts have increased their price forecasts for this year.

New supply investments can and will be triggered at these price levels

Another factor that has become part of the current analytical consensus is that forward prices have not yet reached a level high enough to trigger new supplies. There is little doubt that some of the increased investor flows into the long dated market stem from this belief, just as a significant share of the flows arise from political uncertainty about a potential flare-up with Iran in the Persian Gulf. A regional military conflict accompanied by a disruption in oil shipments through the Strait of Hormuz would certainly result in a price spike. As we argue below, it is our judgment that forward prices have already reached the point at which new supplies can be triggered, and we believe that it is a double- rather than triple-digit level.

Price buoyancy and passive investor flows

We have argued recently that some of the price buoyancy during Q1 reflected financial flows and investments in oil and other commodities. In our Energy Special Report on May 16, *Is it a Bubble*, we argued that large investor purchases of commodity indices and other structured products had a measurable effect on prices during the period leading up to the beginning of Q2. The motivation of investors—mostly institutional investors from pension, endowment, and sovereign wealth funds—was to take advantage of current commodity fundamentals with the expectation that commodities would outperform equities and bonds in the period ahead.

Inflows have an effect on price: 100m of inflow increases the price of WTI by 1.6%

Using CFTC data and reported cross-commodity weightings, we conservatively estimated index positions. We found that from January 2006 to mid-April 2008, more than $90 billion of incremental investor flows were devoted to total assets under management (AUM) by commodity indices, as opposed to the price appreciation of the underlying assets. Contrary to those who criticized this estimate, the size of the new flows makes a difference. We also estimated that dollar weakness and inflation expectations, along with past index performance, could help predict future index inflows. Our study indicated that for every $100 million in new inflows, WTI prices increase by 1.6%.

Past performance predicts future inflow, leading to the makings of an asset bubble

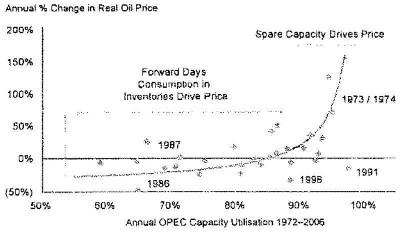
Our conclusion from this study is that we are seeing the classic ingredients of an asset bubble. Financial investors tend to "herd" and chase past performance, comforted by the growing analytical conclusion that markets are tightening, and new inflows, in turn, drive prices higher. Larger allocations by institutional investors, including new sovereign wealth funds desiring to increase their commodity exposure, play a role. So does uncertainty about the true state of market fundamentals, including the level of Saudi spare capacity, the level of Chinese "real demand" versus stockpiling, and other factors that buttress the current bullish consensus.

The anomalous deferred oil price move

Call option interest shows investors' appetite for higher and higher strikes

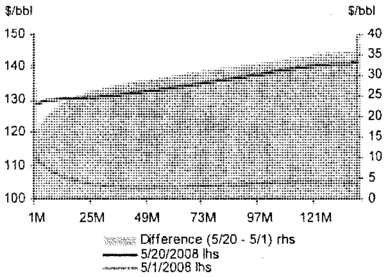
The financial flows responsible for the radical re-pricing of deferred WTI (the back end of the curve) in May are different from the flows into index funds and structured products in Q1. Figure 4 depicts the changing structures of the WTI curve from May 1 to May 20, as well as the difference between the front and deferred parts of the curve

Figure 3. Relationship of spare capacity and price



Source: Lehman Brothers Research.

Figure 4. Changing structure of WTI curve ($/bbl)



Source: Lehman Brothers Estimates.

out more than ten years. Several factors lie behind this change in curve shape. One of these is depicted in Figure 5, which shows the growth in open interest in call options for December 2008 by strike price. Relative interest has been shifting to further out-of-the-money calls, reflecting a growing bullish attitude by short-term investors. This attitude change was particularly acute during the past month, growing with a crescendo along with market sentiment that was becoming increasingly bullish. Starting around May 15, investor interest in $120 strike prices peaked and began to unwind; meanwhile, interest in higher call, particularly at $150 strikes, continued to rise. One indication of that interest is that as the year has progressed, prices of $150 December 2008 calls rose from less than $0.30 to nearly $8.00.

Producers have not been active, allowing "peak oil" and "peak demand" theories to reign

What has been striking about the rise in the back end of the curve over the first three weeks of the month has been – at least until last Friday – nearly a complete lack of interest by producers in selling oil forward. In the past, producer selling would have slowed or impeded the upward price drive. In its absence, retail investors, hearing a growing number of reports about "peak oil," continued to buy at higher and higher strike prices, indicating that there is no necessary physical ceiling to the market. Meanwhile, a number of banks and well-known investors publicized their views that the long run was also going to be tight for oil markets. For some of these analysts/investors, the reason for higher prices had to do with the need to trigger an adequate supply and demand response; for others, it was because they believed peak oil had arrived and, in their opinion, Saudi Arabia could no longer raise its output.

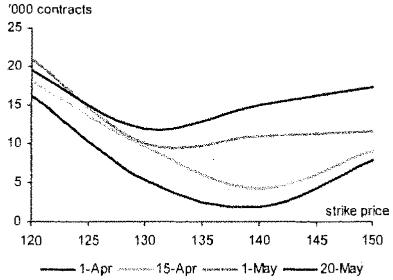
Some also see a window for an attack on Iran lasting until the presidential elections

The investor move was likely also partially motivated by the perception that a window was opening for a military confrontation with Iran. According to some commentators, the window for a US or an Israeli or a joint attack on Iran's scientific and nuclear facilities – if such an attack were to come – opened with the end of President Bush's well-publicized trip to the Middle East (which ended on May 18) and will close a month before the US presidential elections in November.

The radical change in curve shape forced unprofitable spread trades to be reversed

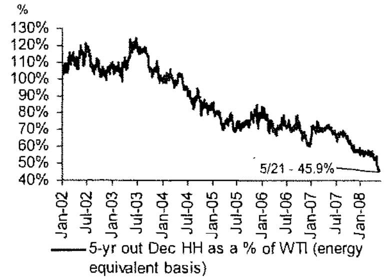
As the back end of the market rose, several other investor triggers reinforced the move upward. These included a rash of new consumer hedges by airlines, locking in prices through 2009, boosting the first 12 months of the forward curve. In addition, numerous investors had "bullish" structures in place, expecting backwardation to strengthen as markets tightened. They were long the front and short the back of the curve, and as the

Figure 5. Call option open interest ('000 contracts)



Source: Bloomberg.

Figure 6. Energy equivalent price of gas to oil (%)



Source: Bloomberg.

back end of the curve moved from backwardation to contango, they had to stop out their positions and unwind them in a fairly illiquid market. Then, as was the case last fall, banks—which were short options at strikes of around $130, which they had written for their investor counterparts—had to buy futures at an accelerating rate to cover their exposure. Finally, a number of small producers that had hedges in place at lower levels also had to reset their positions, and there were concerns that large firms with larger hedges in place to support acquisitions could also unwind their positions.

Some producer-hedging and an end to time-spread position reversals stalled the move

The upward move of the back end of the market stalled and reversed at the end of last week. The triggering event appears to be some combination of an end to the stopping out of positions and, more forcefully, the re-entry of producers to the market to hedge. Doing so, they take advantage of record high deferred prices and arbitrage the difference between current forward prices and their costs structures, which have not inflated at the rate at which deferred prices have risen.

On an energy equivalent basis, the deferred natural gas price is 46% of oil

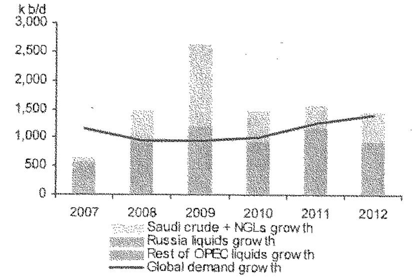
Several other features of the moves of the past three weeks also stand out. What happened to the oil market – at the front end of the market, but even more so at the back end – was unique to petroleum. Unlike other sudden increases in oil prices since last September, the recent move was not reflected in a broad grouping of other commodities. To the contrary, it was not even reflected in natural gas, which arguably should have been more closely tied to oil. Figure 6 depicts 5-year deferred WTI and Henry Hub natural gas prices, in dollars per equivalent thermal units. On an energy-equivalent basis, 5-year deferred natural gas on May 20 was worth only 46% of oil, whereas on May 1, it was 54%. By contrast, the two fuels traded at BTU parity in 2004. While crude oil delivered in 2020 rose by 34%, or $36, natural gas rose only $1/mmbtu, a price increase of less than 10%.

Stealth supply still lurks under the bubble

Indicators point to supply capacity growth outpacing demand growth

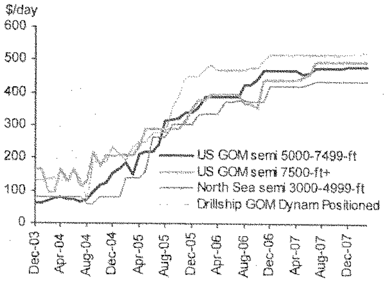
Incremental supply increasingly depends on OPEC's willingness and ability to develop and produce oil. In our 2007 year-end analysis of oil markets, we noted that the declining share of incremental oil from non-OPEC countries in 2008-2010 would test markets. At the same time, we concluded that over the next three years, under almost any demand scenario, incremental OPEC capacity should be sufficient to more than

Figure 7. OPEC + Russia capacity growth vs demand



Source: Lehman estimates

Figure 8. Deepwater rig day rates



Source: ODS Petrodata

balance markets (Figure 7). Through 2009, our analysis indicates that global production capacity should be growing at twice the rate of global demand, and through 2010, any incremental surplus capacities developed through 2009 should carry over. A short-term imbalance between potential supply, including shut-in capacity, and demand should not emerge again until 2011 or beyond.

Three perceptions increase the market's doubts about supply. First, Saudi Aramco officials have re-confirmed that the country will have sustainable capacity to produce 12 million b/d by 2009, excluding the Neutral Zone, which adds another 300-400k b/d to that base. Statements by the Saudi political leadership, including the Saudi king, place doubt on whether this capacity will continue beyond 12.5m b/d. Two critiques revolve around the core position of the kingdom: will it develop this capacity? And will it be willing to use it? We believe that this net new capacity will come on stream, starting with 500+k b/d of 2008 average liquid growth, and that Riyadh will put enough oil on the market for stocks to build.

Rest of OPEC production potential is to upside, not downside

Second, markets doubt the ability of other OPEC countries to add capacity with continuing violence in Iraq and Nigeria. Whereas market reactions to Iraq and Nigeria suggest that oil supply is being undermined, in reality, both countries likely averaged 300k b/d more production in the first five months of this year than in 2007. Violence-related outages have been a structural feature of both countries' production profile since 2003 and will likely continue. But with Northern Iraq exports already up to 600k b/d and Nigeria deepwater capacity expanding almost 500k b/d by the year-end, we believe combined potential additions could tally more than 1m b/d through 2012.

Recent Russian tax changes improve long term production outlook there

Third, doubts about non-OPEC supply, particularly Russian growth, cloud the supply picture. YTD Russian production data have been grim, showing y-o-y declines on the order of 100k b/d, and we now envision no net growth this year. Yet the Russian cabinet's passage this week of tax relief measures for the oil sector makes the longer term picture more sanguine. Rather than Russian production peaking, some industry players now argue that growth could be 10% based on a five-year tax holiday. This sudden change in industry attitude from pessimism to optimism is quite dramatic. Indeed, we believe that some of the prior dour production outlook and data could have partially been a tactic by Russian oil players to improve their negotiating positions. Overall, though, these measures, which take effect in 2009, may not assuage near term production data, but do offer another supply relief valve heretofore underappreciated by the market.

Deepwater response looks robust, as financial factors underpin long dated WTI

Accompanying this development is the debottlenecking of some major obstacles to finding and developing oil, especially in deepwater, an area critical for large new fields. Offshore day rates for deepwater have stabilized, and offshore rig availability looks to increase dramatically – a 650% increase in incremental new rigs available over the past half decade (Figures 8 and 9). And we calculate that much of the divergence between average finding and development costs and 60-month WTI has been due to financial factors, including the slide in the dollar (Figure 10).

Black hole inventories and demand unnerve the market even more

Supply fears can unnerve markets in which US inventories are tight and other data are immeasurable

In the face of declining demand in the US, where we now project that total product use will fall by 430k b/d in 2008 after a -900k b/d 1Q, the bullish forecast for 2008 focuses on a combination of three factors: lack of inventory build in the US and other OECD markets, especially for crude oil; apparently strong demand growth in emerging markets, especially for middle distillates (jet fuel, diesel, and heating oil); and a surge in Chinese demand over the past few months, which is taken to mean that Chinese demand will continue to lead global growth through this year and next. On top of these three signals comes the fear of a disruption from summer weather, domestic instability (e.g., in Nigeria), or geopolitics. Short-term disruptions from Nigeria or southern Iraq are taken to be harbingers of larger disruptions, despite their limited historical context.

Incentives for China to build inventory oppose disincentives for US to build inventory

In our view, these demand signals are misleading, starting with the demand for inventory, but also including the failure of inventory to build in the US during the recent spring maintenance period. We believe the lack of storage builds in the US relates more to weak refinery margins and contracting demand (down more than 900k b/d y-o-y in 1Q08) than lack of available crude supply. Outside of the US, we have little doubt that there is an ongoing build in inventories this quarter. But it appears to be taking place far more in China and the Persian Gulf than in the OECD and, as a result, is less visible and difficult to measure. The Chinese stock build is clear from erratic import data observed so far in 2008, when total imports surged by 14% in February and 25% in March, followed by a 4% decline y-o-y in April. We believe that imports of crude oil and especially products such as gasoline and diesel are growing as a result of mandated pre-Olympic stock building and temporary changes in the tax regime for refiners. Beijing increased mandatory holdings by 5 days for forward demand cover, effect May 1, raising a former 10 day supply rule to 15 days. If this were applicable only to product stocks, China's 8m b/d of consumption implies a stock build of 40 million barrels. If crude inventories are included, China's roughly 7m b/d of refinery throughput would add another 35 million bbls of crude oil inventories.

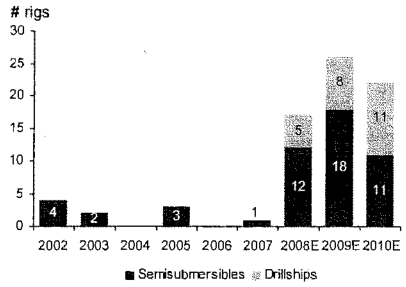
Diesel for coal substitution in power generation is temporary in China

In addition, China appears to be planning to substitute diesel for coal in power generation in Beijing and surrounding provinces starting some 45 days before the Olympics are to begin, or in the third week of June, in order to clear up the environment in the nation's capital.

Middle East power gen and Chinese earthquake reconstruction boost distillates

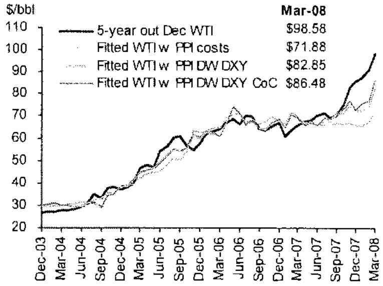
There is little doubt that China and most of the Middle East will have extraordinary demand requirements for distillates in power generation this summer. Distillate markets (and cracks) should therefore remain fairly robust through Q2 and Q3 (Figure 10). The tight situation for distillates and the higher imports to China for inventory build appear to be signs of firm markets through the rest of this year and next. And there is some support for that conclusion, with reconstruction efforts in Sichuan province following the earthquake likely to add 3-4 percentage points per year to Chinese fixed asset investment growth through 2010. That, along with lingering power

Figure 9. Deepwater rigs under construction



Source: Lehman Brothers estimates

Figure 10. Regression of WTI vs PPI, deepwater rigs, DXY, cost of capital



Source: Lehman Brothers estimetes

outages since China's countrywide snowstorm crisis earlier this year, could help to mask overcapacities in Chinese heavy industries that would have otherwise become apparent and led to slower trend oil demand growth even by the end of this year.

Figure 11. Distillate margins forecast

$/bbl	1Q08	2Q08	3Q08	4Q08	2007	2008	2009
Nymex Heating Oil	17.16	23.50	30.00	20.00	13.30	22.67	16.00
ICE Gasoil	20.46	30.00	34.00	25.00	12.82	27.37	20.00

Note: Heating oil calculated against Nymex WTI, gasoil calculated against ICE Brent. Source: Actuals – Bloomberg; Estimates - Lehman Brothers.

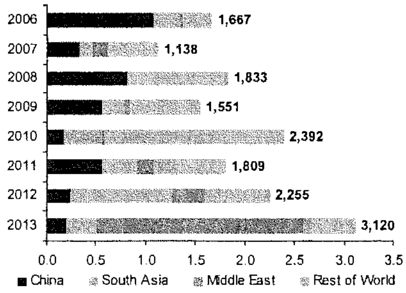
Temporary spurts of strength will likely desert oil markets by the fourth quarter

However, there is a tendency for the market to conflate legitimate reasons for demand growth with what is likely a temporary spurt in recent demand for inventory related to the Olympics. Once these are concluded and economics trump air pollution concerns, many Chinese thermal power plants are likely to switch back from diesel to coal, which is a fraction of the price of diesel on a thermal equivalent basis. Once extra stocking requirements are filled and Middle East summer power demand for diesel has passed, global physical product markets will likely be in for a breather by Q4.

Refining capacity additions should ease product-led strength in distillates

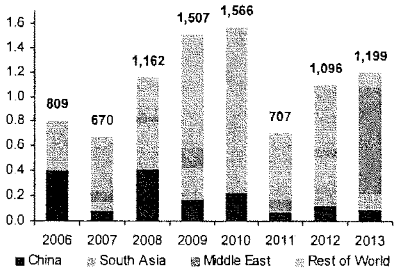
That is especially the case when one adds in a huge spurt of new heavy-sour crude-consuming complex downstream supply capacity coming online in the next year. After a generation during which global demand eroded a persistent surplus refining capacity to the point at which refining was indeed in short supply and margins reached record levels, for the next five years, a growing refining capacity surplus looms. Figures 11 and 12 depict our current view of this emerging refining surplus. From 2008 to 2013, 13m b/d of new refinery capacity should become available, while product demand may grow just 8m b/d. Over the next year alone, about 1.3 m b/d of new refining capacity will become available in just India and China, all capable of consuming heavy crude, a level 1.5x higher than total expected global demand growth. Also competing for end-user markets will be another 3m b/d of NGL production capacity, 1.5m b/d of new biofuel, GTL and CTL capacity, and 1m b/d of new condensate splitting capacity coming on line from 2008 to 2013. This should give rise to greater product competition (as has already appeared in both gasoline and fuel oil markets) and provide a drag on crude oil prices.

Figure 12. Global CDU refinery capacity additions (kb/d)



Source: Lehman Brothers

Figure 13. Global upgrading capacity additions (kb/d)



Source: Lehman Brothers

When things turn...

The history of oil is cyclical; turning points can be sudden, unexpected, and severe

It is difficult to project when market perceptions will turn from the current bullish sentiment. It will almost certainly take a persistent stock build. It might also take a rise in the dollar against the euro and the psychological impact that could have over time, a situation that Lehman Brothers' foreign exchange strategists forecast for the year ahead. In the meantime, market momentum is likely to continue to reinforce the view that even if peak oil is not yet here and even quite far off, there is unlikely to be new supply in the market for at least half a decade. Summer market tightness could, under these circumstances, continue to propel oil prices upward to untested levels. But when peak prices hit, we believe they are also likely to fall precipitously. That's the way cyclical turning points tend to occur—in the midst of a market trend, turning points can be sudden, unexpected, and severe. If history is a guide, the turning point will come. Getting the timing right is the difficult part.

PRICE FORECAST AND FUNDAMENTALS SUMMARY

Light sweet crude quarterly oil price forecast ($, period averages)

	1Q08E	2Q08E	3Q08E	4Q08E	1Q09E	2Q09E	3Q09E	4Q09E	2008E	2009E
Brent ($ per barrel) - NEW	96.31	120.00	125.00	110.00	90.00	95.00	100.00	85.00	113.00	93.00
Revision	0.00	10.00	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00
WTI-Brent differential	1.51	1.50	1.00	-1.00	1.00	-1.00	1.00	-1.00	0.80	0.00

Source: Actuals – Bloomberg; Estimates - Lehman Brothers.

Distillate margins forecast

$/bbl	**1Q08**	**2Q08**	**3Q08**	**4Q08**	**2007**	**2008**	**2009**
Nymex Heating Oil	17.16	23.50	30.00	20.00	13.30	22.67	16.00
ICE Gasoil	20.46	30.00	34.00	25.00	12.82	27.37	20.00

Note: Heating oil calculated against Nymex WTI, gasoil calculated against ICE Brent. Source: Actuals – Bloomberg; Estimates - Lehman Brothers.

Lehman Brothers global supply-demand balance 2006-09 (m b/d)

	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	2006	2007	2008	2009
Global Demand	85.2	86.5	86.8	85.6	86.1	87.4	88.3	86.5	84.4	85.6	86.5	87.4
OECD	48.3	49.5	48.9	47.4	48.0	49.3	49.2	47.2	49.0	48.7	48.4	48.4
USA	20.8	20.8	20.0	20.4	20.4	20.7	19.9	20.3	20.7	20.8	20.4	20.3
Europe	15.3	15.6	15.5	14.9	15.4	15.6	15.8	14.8	15.6	15.3	15.3	15.4
Non-OECD	36.9	37.0	37.9	38.1	38.0	38.1	39.1	39.3	35.5	36.8	38.0	39.0
China	7.4	7.6	7.8	8.1	7.7	8.0	8.1	8.4	7.0	7.5	7.9	8.2
Middle East	7.1	6.6	6.9	7.0	7.4	6.9	7.3	7.4	6.4	6.7	7.1	7.5
Global Supply	84.1	85.7	86.1	86.2	86.7	88.5	88.5	88.2	84.8	84.7	86.9	88.3
Total Non-OPEC	49.2	49.5	49.7	49.4	49.9	50.5	50.9	50.7	49.2	49.6	49.9	50.7
OECD	19.5	19.7	19.6	19.4	19.6	20.0	20.0	19.7	20.0	19.8	19.7	19.8
N. America	14.1	14.1	14.1	14.2	14.2	14.4	14.6	14.6	14.1	14.2	14.2	14.6
Europe	4.8	5.0	4.9	4.5	4.5	4.6	4.5	4.2	5.3	5.0	4.6	4.2
Non-OECD	27.4	27.6	27.7	27.6	27.9	28.1	28.2	28.3	27.0	27.5	27.8	28.2
FSU	12.8	12.8	12.8	12.8	13.0	13.3	13.5	13.6	12.2	12.8	13.0	13.6
Other (1)	2.3	2.3	2.4	2.4	2.4	2.4	2.7	2.7	2.2	2.3	2.4	2.7
OPEC Crude	30.4	31.6	31.8	32.1	31.9	32.7	32.1	31.8	31.6	30.7	32.1	31.8
OPEC NGLs	4.4	4.6	4.6	4.6	4.9	5.3	5.5	5.7	4.1	4.4	4.9	5.8
Inventory Change	-1.1	-0.8	-0.7	0.6	0.6	1.1	0.2	1.7	0.4	-0.9	0.4	0.8
Call on OPEC	31.6	32.4	32.5	31.5	31.3	31.6	31.8	30.1	31.2	31.6	31.7	31.0

(1) Other includes global processing gains, biofuels outside US, Brazil and Europe, GTL, CTL and unaccounted for new projects
Source: Lehman Brothers estimates (including historical numbers).

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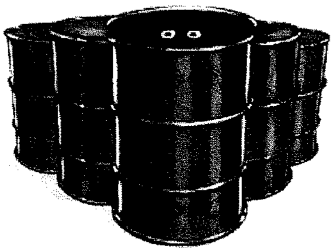
Barron's Cover Story 3/31/2008
Commodities: Who's Behind the Boom?

By Gene Epstein

CHINA, AS EVERYONE KNOWS, IS A BIG FORCE IN THE extraordinary boom in commodities. Its voracious appetite for everything from corn and wheat to copper and oil has helped push up U.S. commodities prices by some 50% over the past 12 months.

But China is by no means the whole story. Speculators — including small investors — are also playing a huge role. Thanks to the proliferation of mutual funds and exchange-traded funds tied to commodities indexes, speculative buying has gone way beyond anything the domestic commodities markets have ever seen. By one estimate, index funds right now account for 40% of all bullish bets on commodities. The speculative juices are even more plentiful — nearly 60% of bullish positions — if you count the bets placed by traditional commodity "pools."


Index funds with buy-only strategies have had outsized influences on the market.

Here's the problem: The speculators' bullishness may be way overdone, in the process lifting prices far above fair value. If the speculators were to follow the commercial players — the farmers, the food processors, the energy producers and others who trade daily in the physical commodities — they'd be heading for the exits. For right now, the commercial players are betting on price declines more heavily than ever before, says independent analyst Steve Briese.

For example, in the 17 commodities that make up the Continuous Commodity Index, net short positions by the commercials have been running more than 30% higher than their previous net-short record, in March 2004.

Briese, author of the recent book *The Commitments of Traders Bible* and editor of the Website CommitmentsOfTraders.org, was one of the first to recognize that information on the bets made by the commercials could provide rare insights into how the "smart money" views the price outlook. These days, the data suggest, the smart money clearly believes that the market's exuberance has turned irrational.

Indeed, the great commodities bubble started springing its first leaks two weeks ago: Oil, gold and other major commodities posted their steepest weekly drop in half a century.

Though prices have since firmed, they could eventually drop 30% as speculators retreat. The only real question is when.

IT'S NOT EASY TO SIZE UP THE influence of the index funds. But based on their known cash commitments in certain commodities, and the commodity indexes their prospectuses say they track, it is possible to estimate the size of their commitments in all commodities they buy. Using this method, analyst Briese (pronounced "breezy") estimates that the index funds hold about $211 billion worth of bets on the buy side in U.S. markets.

Scott Holstein

Analyst Steve Briese sees heavy short-selling by pros.

Applying a similar method, but with slightly different assumptions for indexes tracked, Bianco Research analyst Greg Blaha puts that figure at $194 billion. Either figure is enough to turn the index funds into the behemoths of the commodity pits, where total bullish positions now stand at $568 billion.

Commodities index funds, which arrived on the scene in the late 1990s, have come into their own in the past several years. The biggest index fund, Pimco Real Return[1] (ticker: PRTNX), has seen its assets swell to $14.3 billion from $8 million since its inception in January 1997.

Index funds offer investors an easy, inexpensive way to gain exposure to a segment of the commodities markets or a broad-based basket of commodities. Result: The funds have drawn many private investors who have never ventured into futures, along with pension funds and other institutional players looking to diversify. But for all the virtues that the funds hold as a way of spreading bets across commodity markets, they take only long, or bullish, positions, avoiding short-selling. In other words, they trade on the naïve and potentially fatal assumption that commodities have the same tendency as stocks to rise over the long run.

That this large, bullishly oriented group of funds is flourishing is partly a result of a regulatory anomaly. In recognition of the fact that the commodity markets are too small to absorb an excess of speculative dollars, the Commodity Futures Trading Commission, in conjunction with exchanges, imposes position limits on speculators. But the agency has effectively exempted the index funds from position limits.

The dislocations caused by allowing so much money into markets that have limited liquidity is now causing alarm in the trading pits. That, in turn, is prompting the CFTC to call for an industry gathering April 22 at its Washington headquarters "to hear firsthand from participants to ensure that the exchanges are functioning properly." On this and related issues, CFTC Acting Chairman Walter Lukken declined to comment to *Barron's*.

Unless regulators clamp down, the index funds could become an even bigger force in the markets. In the midst of the recent sell-off, commodity bull Jim Rogers made that very point in an interview with Bloomberg News. Referring to the "over 70,000 mutual funds in the world" compared with the "fewer than 50" that now invest in commodities, he held out the prospect of a speculative bubble that could last for years.

In Rogers' view, the bull market is in the "fourth inning" of a "nine-inning baseball game." To which commodity bear Steve Briese counter-quips, "Maybe, but can't the game be called for a year or two, on account of rain?"

IN THE ORGANIZED COMMODITY MARKETS, trading is in futures and options, which are essentially two-way bets on the outlook for prices. For every buyer (a "long") of a future or options contract betting on a price rise, there is a seller (a "short"), taking the other side of the contract by betting on a price decline. Since speculators and commercials as a group can be either short or long, the charts (see the last page) track the net position — longs minus shorts — held by either group. Courtesy of Briese, the charts track net long or short positions in dollars, based on the dollar value of the commodity each futures or options contract covers.

The speculators, now so bullish, are mainly the index funds. To see how their influence on the market has become outsized, just look at how they operate. Nearly $9 out of every $10 of index-fund money is not traded directly on the commodity exchanges, but instead goes through dealers that belong to the International Swaps and Derivatives Association (ISDA). These swaps dealers lay off their speculative risk on the organized commodity markets, while effectively serving as market makers for the index funds. By using the ISDA as a conduit, the index funds get an exemption from position limits that are normally imposed on any other speculator, including the $1 in every $10 of index-fund money that does not go through the swaps dealers.

The purpose of position limits on speculators, which date back to 1936, is clearly stated in the rules: It's to protect these relatively small markets from price distortions. An exemption is offered only to "bona fide hedgers" (not to be confused with "hedge funds"), who take offsetting positions in the physical commodity.

The basic argument put forward by the CFTC for exempting swaps dealers is that they, too, are offsetting other positions — those taken with the index funds.

Position limits on speculators, in some commodities specified by CFTC rules and in others by the exchanges, are generally quite liberal. For example, the position limit on wheat traded on the Chicago Board of Trade is set at 6,500 contracts. At an approximate value of $60,000 worth of wheat per contract, a speculator could command as much as $390 million of wheat and still not exceed the limit.

But at least one index fund that does trade the organized commodity markets directly and must therefore abide by the rules — **PowerShares DB Multi-Sector Commodity Trust**

(DBA) — recently informed investors that it was bumping up against position limits and therefore would change its strategy.

No such information is available from individual swaps dealers. But based on CFTC data on their total position in a commodity like wheat, together with the fact that only four dealers account for 70% of all the trading from the ISDA, it is quite clear that if the exemption were ever rescinded, the dealers' trading in these markets would no longer be viable.

Speculators also use the older commodity pools, whose position is likewise tracked on the charts. The pools, open to sophisticated investors, are flexible enough to sell short as well as buy long and are subject to position limits. But since they are generally trend-followers, they will almost always go long in bull markets. Through most of the recent period, then, the pools have been adding to the price distortions caused by the index funds. Add the pools' bets to those of the index funds, and speculative money forms 58% of all bullish positions.

To get a further idea of the impact of these speculative bets, *Barron's* asked Briese to measure them against production in the underlying markets. He calculates that in soybeans, the index funds have effectively bought 36.6% of the domestic 2007 crop, and that if you add the commodity pools, the figure climbs to 59.1%. In wheat, the figures are even higher — 62.3% for the index funds alone, and the figure jumps to a whopping 83.6% if you add the pools. Betting against them as never before are the commercials, who deal in the physical commodity.

The CFTC provides these figures on index trading for only 10 commodities. Why are such major commodities as crude oil, gold, and copper excluded? The agency's rationale, which even certain insiders question, is that it would be hard to get reliable information on these other commodities from the swaps dealers.

WHAT MIGHT FINALLY TRIGGER THE bursting of the commodities bubble?

One possible trigger was cited in a *Barron's* interview with Carl Weinberg of High Frequency Economics, published last week. Weinberg anticipated a break "some time this year" in industrial commodities, including crude oil, copper and natural gas once there is news of "even the slightest slowdown in the Chinese economy," the country whose insatiable demand, together with that of India, has been a rallying cry of the bullish speculators. When industrial commodities prove vulnerable, speculative money could start fleeing agricultural commodities, also.

Société Générale analyst Albert Edwards goes much further. Based on his view that the "Commodity bubble is nonsense on stilts," Edwards holds the "very strong conviction that before the end of this year, commodity prices...will be unraveling." He believes the triggering events will be the "unfolding U.S. consumer recession" and likelihood of "negative CPI [consumer price index] inflation rates."

A sudden turnaround in the dollar could be another trigger, notes Briese. By making dollar-denominated commodities ever cheaper in terms of other currencies, the collapsing dollar has been a legitimate bullish factor. "But the buck won't go down forever," Briese argues. "The same cycles that coincided with the dollar's major bottom in 1992 are due to make a low later this year. A rebounding dollar would pinch demand for dollar-denominated commodities."

Alternatively, to borrow a quip from the late humorist Art Buchwald — who once explained that his candidate lost the election owing to "not enough votes" — the bubble could burst from not enough buying. Brokerage houses have been advising their clients to allocate part of their portfolios to commodities, compared with allocations of zero several years ago. Even a shift of five percentage points would have been more than enough to account for the dollars that have fueled the "nonsense on stilts."

But what if the U.S. economy proves more resilient than currently thought, doesn't fall into recession, and instead starts growing again? The resulting rally in the stock market could send the allocation share back to zero and the bubble could burst, not with a bang, but with a whimper.

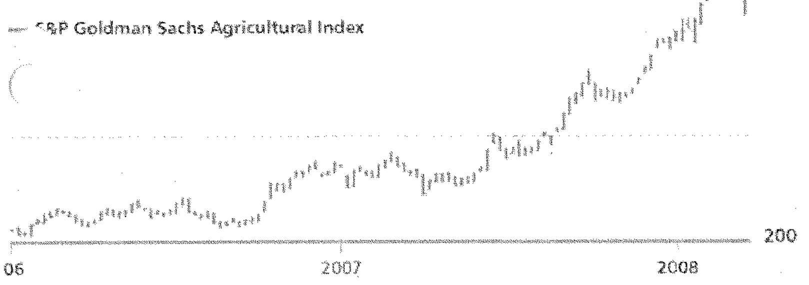
The CFTC could also prick the bubble by enforcing its own rules. If the agency were to rescind the exemption on position limits given to the index funds (say, on a phased basis, so that the funds could make an orderly retreat), prices would probably fall back to reflect their true supply-demand fundamentals.

Briese's analysis of commercial hedger positions leads him to believe that commodities in general were fully valued in terms of the fundamentals as of early September 2007. Based on the 24-commodity S&P Goldman Sachs Commodity Index, that would mean about a 30% collapse from present levels. But, he adds, "Given the tendency for prices to overshoot, commodity values could be cut in half before they stabilize."

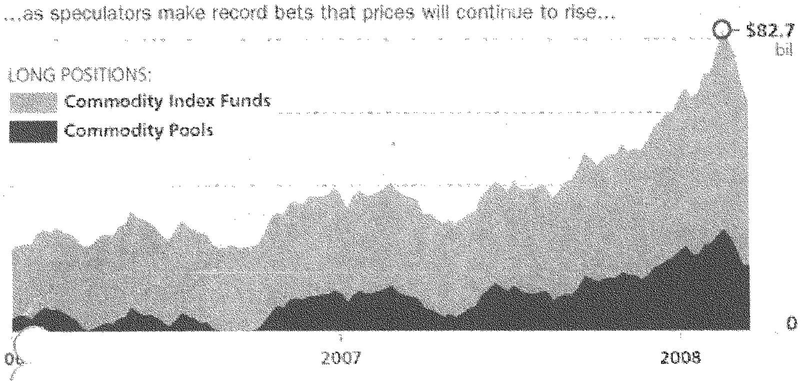
Maybe it's time to start listening to the smart money.

BULLS vs. BEARS

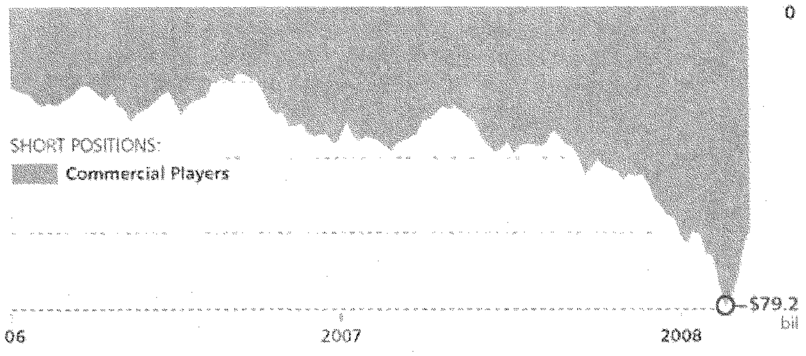
Commodity prices have recently hit record highs...



...as speculators make record bets that prices will continue to rise...



...while commercials who deal in these commodities make record bets prices will fall.



Sources: Standard & Poor's; Commodity Futures Trading Commission; Steve Briese

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Ex-Nymex Director Guilty of Fraud

By AARON LUCCHETTI and GREGORY MEYER
April 9, 2008; Page C1

A former board member at the New York Mercantile Exchange pleaded guilty to two felony counts related to illegal natural-gas trading -- perhaps adding to longstanding distrust of the way traders handle orders on exchange floors.

On several occasions, Steven Karvellas, 48 years old, made trades and then waited to see how they turned out before assigning the trade to either his own account or a customer's, according to a plea agreement announced Tuesday. That meant Mr. Karvellas, of Allendale, N.J., was able to cherry-pick winning trades for himself, while leaving his customers with less-favorable prices.

HIGH IDEALS

From a 2002 letter to fellow New York Mercantile Exchange members by Steven Karvellas, who pleaded guilty Tuesday to illegal natural-gas trading:
"The shocking collapse of Enron indicates that our Exchange does wear a white hat in the financial world. We illustrate how markets should operate, honestly and with openness and transparency that gains the public's trust. Re-electing me will help to insure that our positive message is broadcast in the press and throughout the government. ... "
Sincerely, Steven J. Karvellas
Source: Nymex Holdings Inc.'s Web site

The case is particularly embarrassing for the exchange, a unit of publicly traded **Nymex Holdings** Inc., because Mr. Karvellas was on the floor exchange's board -- and even led its compliance-review committee -- when the illegal trades occurred.

In a 2002 letter sent to Nymex members as part of a re-election campaign, Mr. Karvellas wrote that the "shocking collapse of Enron indicates that our Exchange does wear a white hat in the financial world. We illustrate how markets should operate, honestly and with openness and transparency that gains the public's trust."

"It takes a lot of chutzpah to be on the board of an exchange and simultaneously breach your customers' interest in a fraud," said Gregory Mocek, director of enforcement at the Commodity Futures Trading Commission, which handled the case with Manhattan District Attorney Robert Morgenthau.

Under CFTC rules, floor brokers like Mr. Karvellas can operate as both a broker for their customers and trader for themselves. But when acting in this "dual trader" mode, floor brokers have an obligation to act in the best interest of their customers, Mr. Mocek said. That includes a duty to seek the best possible prices for customers.

"You've got the fox in the chicken house," Mr. Morgenthau said.

Mr. Karvellas, who declined to comment, pleaded guilty to one count of commodities fraud and one count of tampering with physical evidence. He will serve five months in jail and pay penalties and fines totaling $850,000.

Three other Nymex traders also pleaded guilty to trading ahead of customer orders. And three additional people, including a former Nymex employee, were charged as part of what officials described as a continuing investigation into fraud against clients on the century-old exchange.

Nymex, which is being acquired by Chicago Mercantile Exchange parent **CME Group** Inc., and other floor exchanges have been hurt in recent years by the rise of electronic trading, which has lured large institutional investors to send more trades to systems that don't rely on open-outcry exchanges. Nymex has responded aggressively to the speed and cheaper costs of electronic trading, including an earlier agreement in which the CME is handling the electronic trades of Nymex's energy contracts.

Former Nymex trader Steven Karvellas after leaving court on Tuesday.

Nymex's cavernous floor in lower Manhattan still has many supporters among investors with large, complex orders that benefit from hand-holding by experienced traders. But floor trading remains vulnerable to manipulation. In 2005, 15 traders at the New York Stock Exchange were indicted on charges that they cheated investors. Many of the traders won their criminal cases, but the exchange paid $20 million to beef up its surveillance systems.

Mr. Karvellas, a finance major at the University of Pennsylvania in Philadelphia, began his Wall Street career as a clerk in 1981 and later traded gold futures at the Commodity Exchange, or Comex, which eventually merged with Nymex. In 1989, Mr. Karvellas and another trader generated headlines by getting into a fistfight in the gold-trading pit.

Kenneth Moskowitz, a friend of the Nymex trader, says Mr. Karvellas was involved in his community, coaching youth football, helping high-school students with college applications and paying for underprivileged kids to go to summer camp. "He's really lived an exemplary life," said Mr. Moskowitz. Another person close to Mr. Karvellas said he wasn't disciplined for the 1989 gold fight because he was defending himself in the matter.

After he began trading natural-gas futures in 1990, Mr. Karvellas rose through the close-knit ranks of Nymex traders, and joined the exchange's board in 1996. With more than 20 members, that group essentially functioned as the exchange's corporate board until Nymex went public in 2006.

Unlike the boards of stock markets, current and retired traders frequently sit of the boards of the U.S. futures exchanges. The CFTC is considering whether to require more independence on futures exchange boards.

According to the plea agreement, the illegal trades occurred between September 2002 and May 2003. From 1998 to 2002, Mr. Karvellas was on the Nymex board's executive committee. He led its adjudication and compliance-review committees from 2000 to 2003.

Mr. Karvellas was forced to resign from the board in 2006 after paying fines for trading-record infractions that exceeded the allowable limit at Nymex.

In January, a grand jury subpoenaed a five-year-old trading ticket related to the investigation. Mr. Karvellas pleaded guilty to tampering with physical evidence by ordering a subordinate to destroy the trading ticket.

In a statement, James Newsome, chief executive of Nymex Holdings, said the company "will not hesitate to work with law enforcement authorities, or take whatever steps are otherwise necessary, to protect the integrity of our markets." A CME spokeswoman said the probe wouldn't affect its pending takeover of Nymex.

Away from the trading floor, Mr. Karvellas owned a camp in Port Jervis, N.Y., which trained gymnasts, including Olympic gold medalist Shannon Miller. A spokeswoman for Ms. Miller said she knew Mr. Karvellas through her coach, Steve Nunno.

During the 1990s, Mr. Nunno ran the camp, but he and Mr. Karvellas parted ways after disagreements about how it should be run. Mr. Nunno recalled that Mr. Karvellas would threaten to close the camp if it didn't hit registration targets.

"It became very difficult to work with him," Mr. Nunno said.

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US watchdog rebukes FSA on derivatives

By Jeremy Grant in London

Published: April 22 2008 00:00 | Last updated: April 22 2008 00:00

The UK's Financial Services Authority lacks transparency in its oversight of the booming derivatives markets, a top US financial regulator warned on Monday.

In an unusually sharp rebuke of a regulator by a peer, Bart Chilton, a commissioner at the Commodity Futures Trading Commission, said that Britain's financial watchdog needed to apply "greater oversight and enforcement".

The comments expose long-standing concern within the US futures watchdog that London's huge energy and commodities markets could be more at risk of fraud and manipulation than those in the US because of a different regulatory approach.

They also highlight the difficulty regulators will have in reconciling differing approaches to policing markets that are increasingly interconnected. The FSA places an emphasis on deterrence, rather than the use of high-profile prosecutions and fines in the US.

"I am generally concerned about a lack of transparency and the need for greater oversight and enforcement of the derivatives industry by the FSA," Mr Chilton told a meeting of the Futures and Options Association in London. He was expressing his personal views, not those of the CFTC as a whole.

An FSA spokesman said: "We have a risk-based approach that suits our markets. We are an organisation that believes in credible deterrence, we are not enforcement-led."

Mr Chilton's concerns come as the Securities and Exchange Commission is pushing a new system of "mutual recognition" with foreign counterparts that aims, in part, to make cross-border enforcement easier.

Last week the EU-US Coalition of Financial Regulation, which groups investment banks in the US and Europe, called on the European Commission and SEC to move rapidly towards "wider acceptance of regulatory recognition".

Mr Chilton said: "I support greater co-ordination and harmonisation of rules and regulations on both sides of the Atlantic, but that should only come with strong oversight and enforcement from both the US and UK."

The CFTC has long operated a successful system of mutual recognition with the FSA that allows UK futures exchanges to offer their products to US investors without having to register as exchanges in the US.

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Seeking Alpha α

IMF: Speculation Playing 'Significant Role' in Oil Price Surge

by: Research Recap

posted on: May 14, 2008 | about stocks: OIL / USO

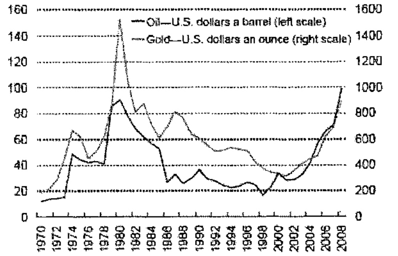
The recent surge in oil prices cannot be explained by economic factors alone, meaning speculation has played a "significant role," according to the International Monetary Fund.

In an analysis in its Regional Economic Outlook
for the Middle East and Central Asia, the IMF says "The recent surge in the oil price (from $80 to over $100 a barrel) seems to go well beyond what would be indicated by the growth of the world economy."

> Producers in particular argue that fundamentals would yield an oil price of about $80 a barrel, with the rest being the result of speculative activity.

The IMF says one way to get a sense of speculative activity is to compare movements in the real price of oil with the real price of gold. This relationship has been surprisingly close for a long period of time. Gold is well known to be a highly speculative commodity, driven by factors other than derived demand, the IMF said.

Figure B7.2. Oil and Gold Prices Deflated by U.S. CPI
(Base year = 2007)



Source: IMF, *World Economic Outlook*.

"One could reasonably argue that this relationship, which has continued in 2008, is evidence of speculative behavior in oil. If the oil price does fall significantly in the near term, it may reflect more the unwinding of speculative positions in both gold and oil than indicate that a recession is under way."

"In summary, it appears that speculation has played a significant role in the run-up in oil prices as the U.S. dollar has weakened and investors have looked for a hedge in oil futures (and gold)."

> As financial market conditions settle down, fundamentals should take over and oil prices should come down further from the highs recently observed.

THE WALL STREET JOURNAL. ONLINE

June 16, 2008

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Saudi Arabia's Leverage In Oil Market Is Sapped

By NEIL KING JR.
June 16, 2008; Page A8

As Saudi Arabia prepares to host a summit of oil producers and consumers Sunday, it finds itself without its usual leverage over oil markets. Concerned about the long-term impact of soaring prices, Saudi Arabia is limited in its ability to do much about it.

The world's largest oil supplier does have two blunt weapons in its arsenal if it wants to try to beat down soaring oil prices to assuage the growing outcry over pump prices in world capitals. It can open its spigots wider to put more crude on the market, and it can sharply discount that crude to get refineries to lap it up.

Industry insiders say that Saudi Arabia may employ exactly that double whammy in a bid to take the steam out of a market that has sent prices up more than 40% since the start of the year. They say that during Sunday's summit in the coastal city of Jeddah, which Riyadh called to address the problem of soaring oil prices, Saudi officials will propose boosting production by at least several hundred thousand barrels a day.

U.N. Secretary-General Ban Ki-moon said Sunday after meeting with the country's oil minister that the kingdom will raise production by 200,000 barrels a day in July. It wasn't immediately clear whether that rise would be permanent or a one-off response, as was a Saudi boost of 300,000 barrels a day in June. Saudi Arabia now pumps about 9.45 million barrels a day. On the New York Mercantile Exchange, benchmark crude for July delivery fell $1.88 Friday to settle at $134.86.

The question is whether even a temporary surge of discounted Saudi oil would be enough to reverse the most bullish oil market in decades. And if so, would the price remain lower for long?

Some industry analysts say that such a strategy, if it is employed, might not have a lasting effect and could even risk pushing prices higher if Saudi Arabia doesn't find willing customers for the additional oil at a time when demand is beginning to erode. This is especially so given that most of Saudi Arabia's excess capacity consists of heavy and high-sulfur crude, which is harder to refine into high-end products like gasoline, and therefore is much less in demand.

An effort to artificially bludgeon prices down, they say, could magnify the very concerns that have helped drive prices up in the first place -- above all, the worry over the reliability of long-term supplies. It would also mean delving into Saudi Arabia's already thin spare capacity, which has been another goad for upward prices.

One thing that nearly all sides agree on: the market isn't hankering for additional oil. Saudi officials have insisted loudly for months, most recently on Friday, that more oil wasn't the answer. Instead, they have blamed soaring prices on the falling dollar, U.S. interest-rate policy and the increasing involvement of big investment funds in the commodities market. Saudi Oil Minister Ali Naimi said Friday that soaring prices were "unjustified by the fundamentals" of supply and demand.

One of Mr. Naimi's advisers, Ibrahim al-Muhanna, expanded on that, saying in a brief interview that Saudi Arabia continues to satisfy all of its customers' demands, and that there were no signs of demand for increased supply during the most recent round of monthly sales, which occurred last week. "What we want is a stable market," he said. "We want whatever will help create stability and moderate prices."

Saudi Arabia, which supplies about 11% of the world's daily oil needs of around 86 million barrels, is under increasing pressure to do something to tamp down prices. King Abdullah told his ministers last week to pursue any remedy, according to people familiar with the matter.

The fear within Saudi Arabia is that sky-high prices will both rattle the world economy and spur efficiencies and new technologies that could undercut demand for oil in the future. Some other members of the Organization of Petroleum Exporting Countries share that concern, but only Saudi Arabia has played the role as a buffer against excess price jolts. The kingdom remains the only country with sizable excess capacity, though that has shrunk in recent years to slightly less than two million barrels a day.

During past oil-price surges such as at the start of the Iran-Iraq war in the early 1980s or after Iraq's invasion of Kuwait in 1990, Saudi Arabia flexed its oil muscle and helped drive down prices by boosting its own exports. In 1998, during a market-share battle with Venezuela and non-OPEC suppliers like Russia, Saudi Arabia used the much heavier cudgel of pouring cut-rate crude onto the market and sent prices plunging.

Today's market is very different. With the emergence of giant consumers like China and India, producers have strained to meet demand. That has diminished the ability of Saudi Arabia to use its supply cushion to help modulate markets. That may not keep the Saudis from trying, however.

"The Saudis are increasingly seeing that it is in their long-term strategic interests to bring down prices," said David Kirsch, an oil analyst at PFC Energy in Washington. "What they are going to have to do, though, is very aggressively price whatever oil they offer. That is going to be their challenge."

Refiners not only would have to go to more trouble to refine the heavier crude, they also would have to be willing to spend money to put large amounts of the oil in storage, even at the risk that oil gets still cheaper before they are able to refine it. There are strong reasons to suggest that even a sharp boost in production may do little to blunt concerns within the industry.

For one, Saudi Arabia has now made clear that it may never increase its production capacity beyond 12.5 million barrels a day -- its target for the end of 2009 -- up from its current level of 11.4 million barrels a day. After that, all drilling and exploration could go to maintain that as the country's oil fields age.

With demand still growing strongly in China and other parts of Asia, as well as within the Persian Gulf itself, the market is now digesting the fact that Saudi Arabia -- with nearly a quarter of the world's proven oil reserves -- may provide only a few of the added barrels that countries will need in the future. That has helped deepen the widespread fears over whether other suppliers can keep up with demand in the next decade.

Some analysts have pointed to the country's Khursaniya oil field, which is expected to come onstream next month, as proof that Saudi Arabia can easily bump up its production by 500,000 barrels a day if it wants. But the plan for that field was to ramp up its production slowly, while using the new stream to allow some of the country's older fields to rest.

Write to Neil King Jr. at neil.king@wsj.com[1]

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June 17, 2008

Mr. Walter Lukken
Acting Chair
Commodity Futures Trading Commission
1155 21st Street, N.W.
Three Lafayette Center
Washington, D.C. 20581

Dear Chairman Lukken:

With crude oil prices futures spiking from $68/barrel a year ago to nearly $140/barrel today, questions have been raised about whether the estimated $260 billion in commodity index investments has, in combination with supply and demand expectations, untethered oil and other commodity prices from supply and demand fundamentals. It is imperative to understand more clearly what dynamics are at work in the futures and bilateral markets, and whether a tipping point has been reached that has caused prices to deviate from economic fundamentals.

Although long overdue, we commend the Commodity Futures Trading Commission (CFTC) for issuing a Special Call to overcome its persistent lack of information regarding passive investments in commodity indexes and single commodities. We also support your efforts to secure additional information from the Financial Services Administration and ICE Futures Europe regarding the futures traded on that foreign board of trade. Despite these initiatives, the futures markets remain far from transparent to regulators or the public.

In particular, Congress needs to better understand the role and activities of Sovereign Wealth Funds in commodity markets in order to assess whether or if any of the oil producing nations may be contributing to the upwards pressure on commodity prices through undisclosed investment in energy or other commodities. We were interested to learn that all five commodity dealers represented at the CFTC's June 10, 2008, Energy Markets Advisory Committee meeting (Goldman Sachs, Moran Stanley, Merrill Lynch, Lehman Brothers, and D.E. Shaw) had Sovereign Wealth Funds as clients.

In addition, a number of experts have questions whether commodity index investments have distorted energy and agricultural commodity prices. In particular, these experts have questioned whether massive inflows of capital from pension funds, endowments, sovereign wealth funds, and other institutional investors are having a disproportionate effect on the comparatively small commodity markets because these investments are exclusively on the buy side and, unlike traditional speculators, are not price sensitive.

Buttressing our concern, a prominent Lehman Brothers oil analyst recently estimated that crude oil futures prices go up 1.6 percent for every $100 million of inflows into commodity indexes. Lehman estimated that $90 billion has moved into commodity index investments since January 2006.

Position limits were instituted by CFTC and exchanges to prevent excessive speculation and price distortion in commodity markets, and can be exceeded only when there is a bona fide need to hedge the price of a product or commodity. Since 1991, however, CFTC authorized a loophole that has allowed swap dealers with no physical commodity exposure to receive exemptions from these position limits. This was a remarkable departure from the spirit and intent of the Commodity Exchange Act, which only allowed purchasers, sellers, and users of commodities to "hedge their legitimate anticipated business needs for that period of time into the future for which an appropriate futures contract is open and available on an exchange."

The CFTC apparently abandoned this longstanding principle after J. Aron and Company (now Goldman Sachs) asked CFTC to provide them with exemptions from positions limits for corn, wheat, and soybeans futures in order to permit the company to offset price risk from swaps exposure related to the Goldman Sachs Commodity Index. On October 18, 1991, CFTC granted J. Aron an open-ended "bona fide" hedge exemption for these index investments—an exemption that has continued to this day.

In addition, exemptions from position limits have been granted at the futures exchange level. For example, the New York Mercantile Exchange (NYMEX) granted 117 hedging exemptions since 2006 for the West Texas Intermediate Crude (WTI) contract, according to recent CFTC communications. NYMEX is authorized under its rules to grant exemptions from the WTI position limits of 3,000 contracts in the final 3 days of trading, and has soft limits of 20,000 contracts for all months combined. Of the 117 exemptions granted, 48 were given to 18 companies based exclusively on swaps exposure, another 44 were issued to 24 companies for combined hedge/swap positions, but only 25 were granted to 11 companies based on a bona fide hedge exposure. The Committee would like to better understand the magnitude of these exemptions and the rationale behind them.

It is fair to ask whether large inflows from commodity index investors are distorting energy prices and undermining the price discovery function, and whether CFTC has the data to help answer this question. It is also fair to ask whether CFTC has been hobbled in policing the markets hedging exemptions, no action letters, and a plethora of exclusions and exceptions carved into law, regulations, and exchange rules.

In order to get a clearer understanding of the implications of these recent exemptions, and in preparation for the June 23, 2008, hearing before the Subcommittee on Oversight and Investigations, we request under Rules X and XI of the Rules of the House of Representatives, the following information by no later than Friday, June 20, 2008:

1. The names of the 18 companies that have secured 48 hedge exemptions from NYMEX based solely on swaps exposure.

2. The total number of futures contracts that these 18 companies were able to hold in excess of the NYMEX position limit for WTI under these exemptions. Please identify the number of long and short positions (without identifying any one company's position). Please advise if any of the swaps exposure involves exemptions related to commodity index investments or single commodity fund investments.

3. Identify the 24 companies that have secured 44 hedging exemptions based on a combined hedge/swap positions (without identifying any one company's position).

4. The total number of WTI contracts in excess of the NYMEX position limit for the 24 companies that have secured 44 hedging exemptions based on combined hedge/swap positions (without identifying any one company's position). Please identify the total number of short versus long contracts. Please advise if any of the swaps exposure is related to commodity index investments or single commodity fund investments.

5. The names of the 11 companies that have secured 25 bona fide hedge exemptions.

6. The total number of WTI contracts for the 11 companies that have secured 25 bona fide hedging exemptions in excess of the NYMEX position limits (without identifying any one company's position). Please identify the total number of short versus long contracts.

7. The number of traders holding positions for all months in excess of the WTI contract all month accountability level for June 6, 2008, and the aggregate amount of such positions in excess of the 20,000 all month accountability levels. Please provide information on short versus long positions.

8. In addition to the exemption letter granted to J. Aron and Company on October 18, 1991, how many other CFTC exemptions have been granted to companies that wish to exceed futures position limits to offset price risk from swaps exposure to a commodity index? Please provide copies of such letters.

9. Please provide a list of Sovereign Wealth Funds that have commodity investments including:

    a. An estimate of the open interest in futures and options held by Sovereign Wealth Funds.

    b. How many Sovereign Wealth Funds from countries that are net exporters of oil are taking positions in oil or other energy futures.

    c. In the event that CFTC does not have sufficient information to assess the size and extent of these investments, please issue a Special Call for information to obtain a list of the Sovereign Wealth Funds, identify their aggregate positions in commodities, and make this aggregated information public.

10. The Commission obtains quarterly reports from ICE Futures Europe and other foreign boards of trade pursuant to CFTC staff "no action" letters. The reports identify the overall volumes and the amount of U.S. originated trading activity in each contract. Please provide copies of these quarterly reports for the past two years for the foreign boards of trade that are trading futures contracts for energy with a delivery point in the U.S. (such as the WTI contract).

11. Please provide a side-by-side comparison of the market rules governing commodity trading under the Financial Services Authority and the CFTC.

Your assistance with this request is appreciated. If you have any questions, please contact us or have your staff contact Richard Miller with the Committee on Energy and Commerce staff at (202) 226-2424. Thank you for your consideration.

Sincerely,

John D. Dingell
Chairman

Bart Stupak
Chairman
Subcommittee on Oversight and Investigations

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable John Shimkus, Ranking Member
Subcommittee on Oversight and Investigations

The Honorable Bart Chilton, Commissioner
Commodity Futures Trading Commission

The Honorable Michael V. Dunn, Commissioner
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June 11, 2008

Majority Leader Harry Reid
Minority Leader Mitch McConnell
Speaker Nancy Pelosi
Minority Leader John Boehner

Dear Leader Reid, Leader McConnell, Speaker Pelosi, and Leader Boehner:

Record-high, irrational oil prices are smothering the American economy. While we all recognize that a commonsense, long-term energy policy is desperately needed in this country, given the grim statistics that are getting worse every day, Congress must find bipartisan, near-term solutions. Absent an immediate reform in the widely-speculative energy commodity futures markets, oil prices worldwide will continue to surge, clamping down even harder on the U.S. economy.

In May, unemployment climbed again to 5.5%, the highest one-month spike in 22 years; many thousands more employees were laid off; commercial air service to 100 cities was completely eliminated or will be by year-end; businesses closed because they cannot begin to raise prices of goods enough to recoup surging fuel costs; and families chose between filling up their gas tanks or grocery carts.

Leading energy experts across the country agree that recent, unprecedented jumps in crude oil prices are due, in large measure, to rampant speculation in the energy commodities markets. Just last Friday, when oil spiked by $10 per barrel, speculators traded 22 barrels of "paper oil" for every single physical barrel of oil consumed. Sophisticated "paper" speculators who never intend to use the oil are driving up costs for consumers and making huge profits with little to no risk. Having abandoned the stock market, these aggressive traders are manipulating the energy market to their sole advantage.

This country needs a *fair, transparent and balanced energy commodities market*, not one that is skewed to benefit speculators and institutional investors. We urge immediate action, through either the Commodity Futures Trading Commission or Congress, to ensure meaningful reforms are put in place to restore market integrity. Although specific measures must be carefully drafted to avoid unintended consequences, priority steps include (1) fully closing all loopholes, including the "Enron Loophole" and "Swaps Loophole, " that allow institutional investors to avoid limits on the size of their investments; (2) ensuring all energy traders, including those trading on foreign boards of trade, are subject to the limits imposed on U.S. exchanges; and (3) increasing margin requirements and imposing appropriate disclosure/financial requirements on institutional investors.

The undersigned strongly urge Congress to take meaningful steps as soon as possible to address the distorted energy commodities market and stop any further decline in the U.S. economy. We offer our full support for your efforts.

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Airports Council International
Air Transport Association
American Association of Airport Executives
American Society of Travel Agents
American Trucking Associations
Associated Builders and Contractors
Business Travel Coalition
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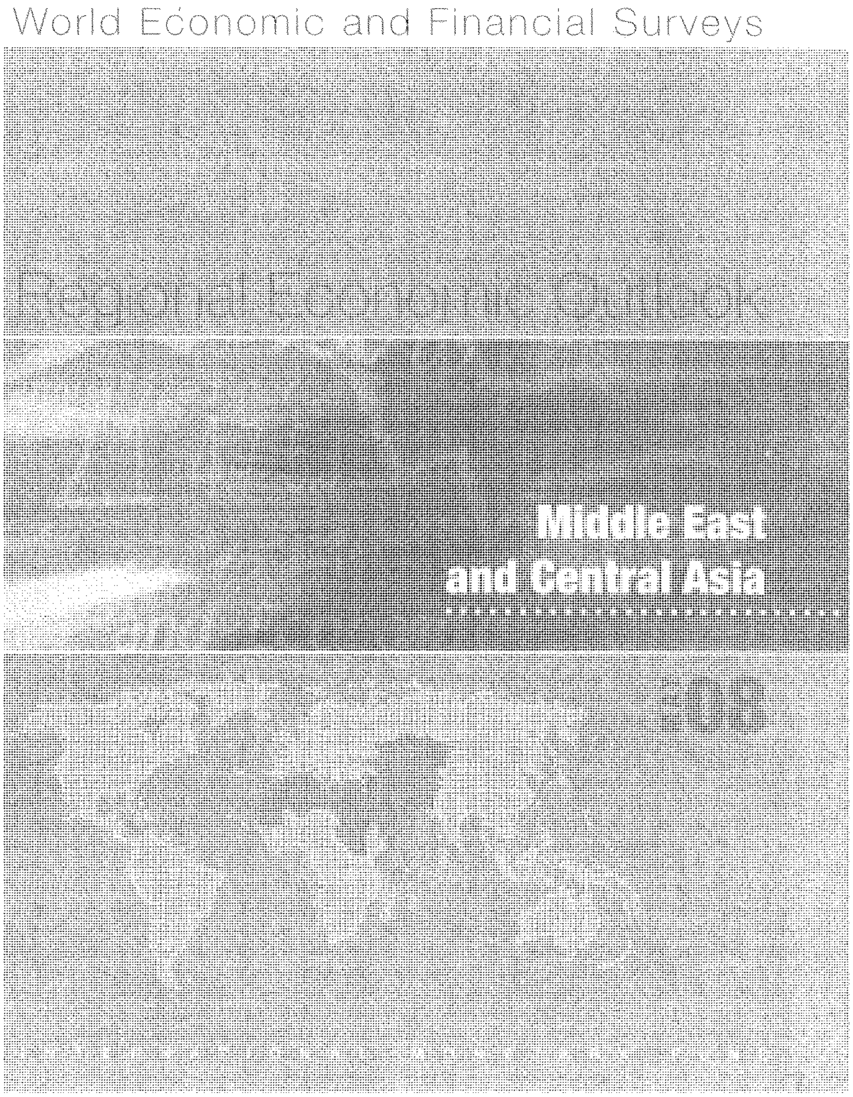
New England Fuel Institute
Petroleum Marketers Association of America
Regional Airline Association



World Economic and Financial Surveys

Regional Economic Outlook

Middle East
and Central Asia

08

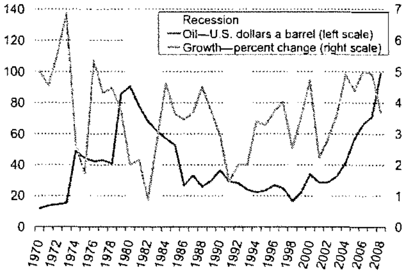
International Monetary Fund

Box 7. Oil Prices: Fundamentals or Speculation?

Oil prices have continued to break records in 2008 (at over US$100 a barrel, and reaching a historical high of US$119 a barrel on April 22), even while it is widely believed that the U.S. economy is sliding into recession. At these levels, are oil prices being driven by fundamentals or by speculation?

Since 1970 there have been five global recessions (with world economic growth falling to about 2½ percent a year or less). The first two (1974–75 and 1980–82) were associated with large prior hikes in oil prices (reflecting supply shocks). As Figure B7.1 shows, real oil prices did not immediately fall when the recessions began.[1] Oil prices remained quite firm one year into each of the recessions, and did not fall significantly until world economic growth had clearly recovered. By contrast, the following three recessions (1991–93, 1998, and 2001) were associated with declines in real oil prices at the outset (although these declines were not particularly large). Why the difference? It is possible that the Organization of Petroleum Exporting Countries (OPEC) had greater market control in the 1970s than it did during the 1990s. As a result, it was easier to prevent falls in oil prices (as demand weakened) in the 1970s than it was in the 1990s.

Figure B7.1. Real Oil Prices and World Growth



Sources: Data provided by country authorities; and IMF staff calculations.

This observed pattern suggests that it would take a global recession to bring about a major decline in oil prices. Currently, the IMF is projecting a decline in world growth to 3.7 percent, which means that oil prices should not be expected to fall sharply if they are being driven solely by economic growth ("fundamentals"). Even if the world does go into a recession, history suggests that the effect on oil prices could be lagged, depending on how much discipline OPEC is able to exert.

It is hard to explain current oil prices in terms of fundamentals alone. The recent surge in the oil price (from US$80 to over US$100 a barrel) seems to go well beyond what would be indicated by the growth of the world economy. Producers and many analysts say it is speculative activity that is pushing up oil prices now. Producers in particular argue that fundamentals would yield an oil price of about US$80 a barrel, with the rest being the result of speculative activity.

It is difficult to get a direct measure of speculative activity. It is true that open positions in oil futures more than doubled in size over 2003–07. Net long noncommercial positions at the New York Mercantile Exchange briefly reached new highs in mid-2007, after which they declined. Yet prices have stayed high even as these speculative positions were unwound. Moreover, there is evidence that changes in net long noncommercial positions generally follow price changes rather than lead them. So this line of reasoning would imply that speculation is not the cause of recent increases in oil prices.[2]

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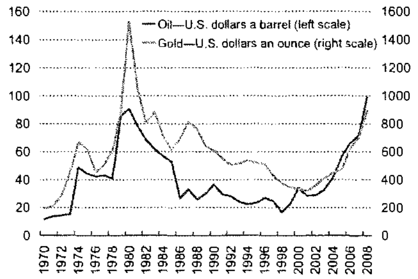
[1] Real oil prices are defined as the nominal price deflated by the U.S. consumer price index (CPI).

[2] It should be noted that the distinction between commercial and noncommercial positions in oil futures is difficult to make. Total positions may be a better indicator of speculative activity.

Box 7 *(concluded)*

Another way to get a sense of speculative activity is to compare movements in the real price of oil with the real price of gold. This relationship has been surprisingly close for a long period of time (Figure B7.2). Gold is well known to be a highly speculative commodity, driven by factors other than derived demand. One could reasonably argue that this relationship, which has continued in 2008, is evidence of speculative behavior in oil. If the oil price does fall significantly in the near term, it may reflect more the unwinding of speculative positions in both gold and oil than indicate that a recession is under way.

Figure B7.2. Oil and Gold Prices Deflated by U.S. CPI
(Base year = 2007)



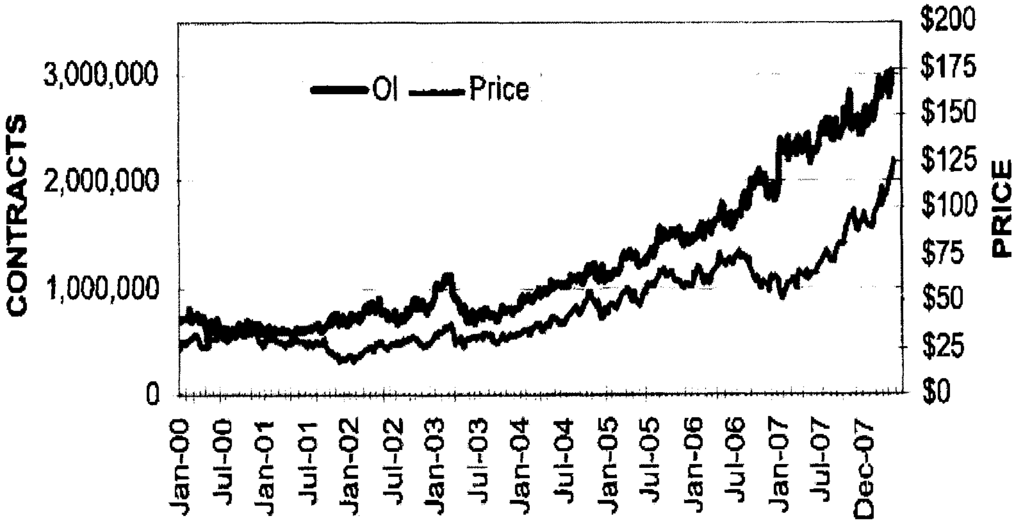
Source: IMF, *World Economic Outlook*.

In summary, it appears that speculation has played a significant role in the run-up in oil prices as the U.S. dollar has weakened and investors have looked for a hedge in oil futures (and gold). As financial market conditions settle down, fundamentals should take over and oil prices should come down further from the highs recently observed. How far they will come down will depend on how the world economy is doing, and if history is to be a guide, they will come down slowly. ■

recession. Growth in emerging markets and developing countries is projected to slow to 6.7 percent from 7.9 percent in 2007, reflecting efforts to prevent overheating in some countries as well as trade spillovers and some moderation in commodity prices. Inflation is expected to remain high in the first half of 2008, but should decline gradually thereafter, as commodity prices stabilize and slack in some countries emerges.

Risks to the baseline projection, however, are significantly to the downside, with the greatest risk coming from the still-unfolding events in financial markets and their potential impact on global activity. The recession in the United States could be more severe if the correction in housing prices and ensuing deterioration of households' net worth are more pronounced. There is also a risk that the credit crunch might intensify, as both engines of credit creation—the banking system and the securities markets—are being impaired at the same time. Similar housing price corrections in other countries in Europe, although likely to be less pronounced, could also weigh down global growth. Continued inflationary pressures also pose downside risks as they may constrain policymakers' room for maneuver. Emerging market economies would be affected more substantially if the advanced economies were to experience a major downturn or if the rise in sovereign spreads and the retreat in equity markets were to intensify. Emerging markets that rely on short-term cross-border borrowing to finance large current account deficits are also more vulnerable to persistent turbulence in financial markets. ■

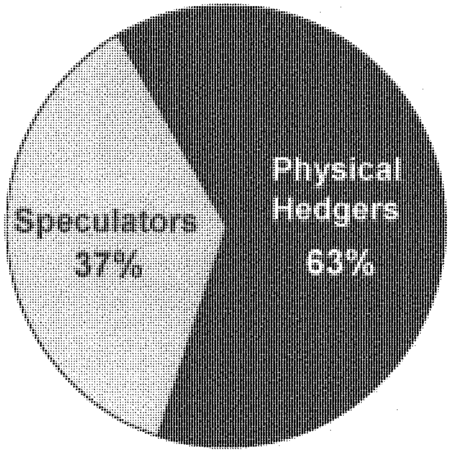
NYMEX TOTAL CRUDE OIL OPEN INTEREST
Vs. Nearby NYMEX Futures



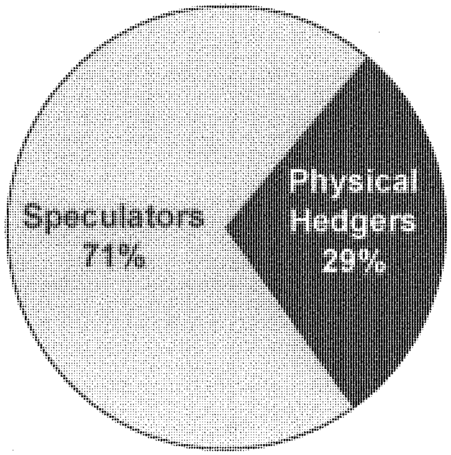
SOURCES: CFTC FUTURES AND OPTIONS COMBINED, CQG

Care of Citi Futures Perspective

Speculators Now Dominate WTI Crude Oil Trading on NYMEX



January 2000

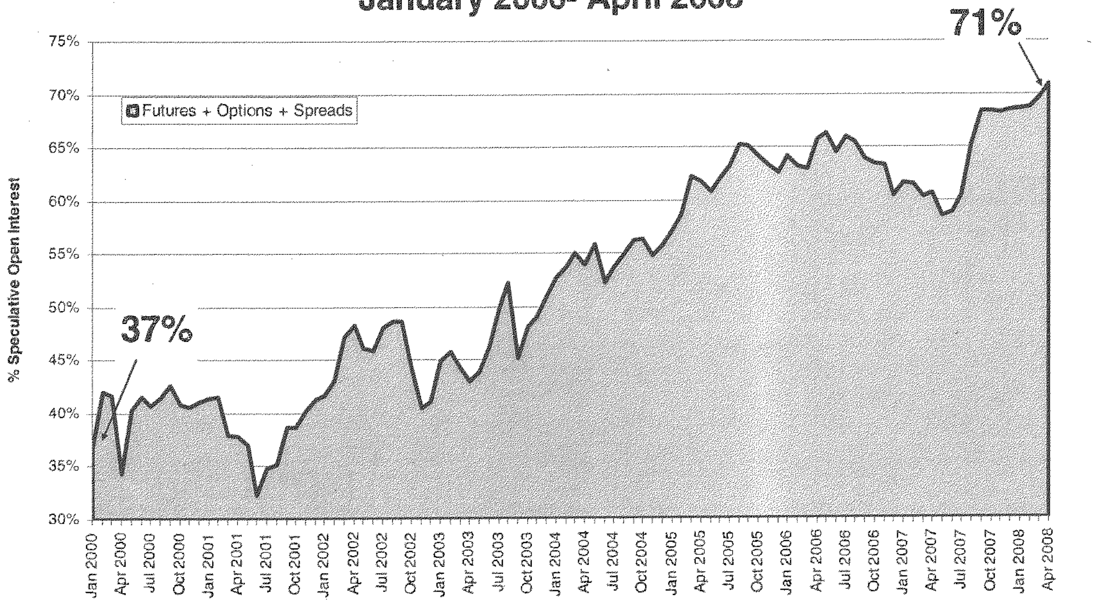


April 2008

*WTI average open interest, long positions
Source: Estimates based on CFTC Data, Office of the Chief Economist

The Rise of Speculation as a Percentage of Open Interest on the NYMEX WTI Contract

January 2000- April 2008



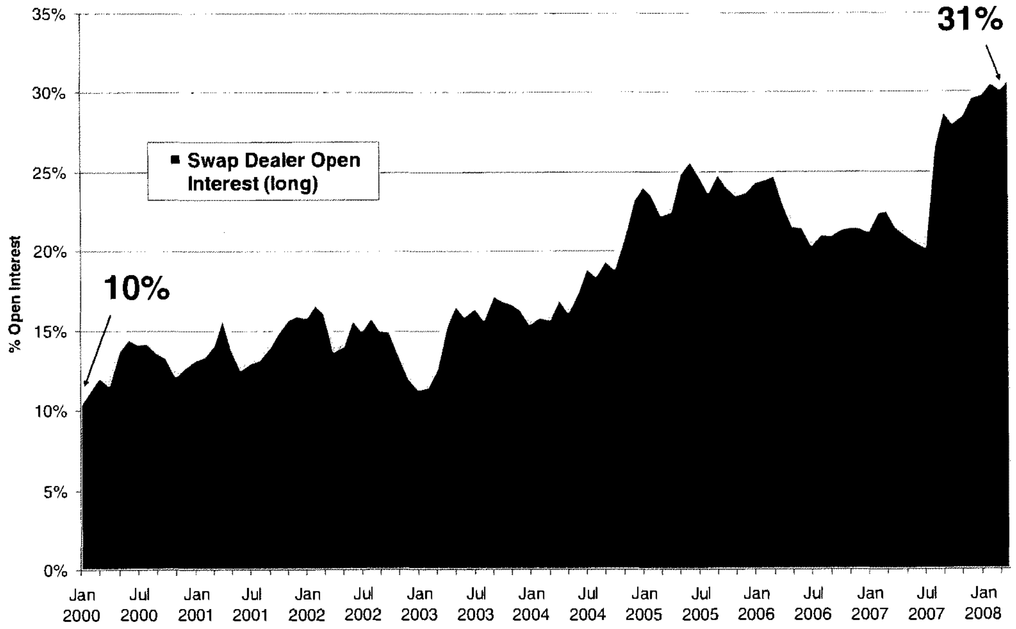
Source: Estimate of share of speculative open interest based on CFTC Data, Office of the Chief

*Long Positions Only

Swap Dealers Growth Triples in Eight Years

WTI Open Interest on NYMEX (Long)

January 2000 - April 2008

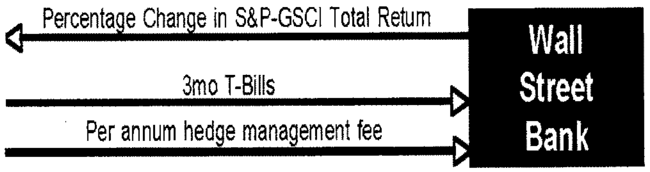


Source: CFTC Data, Office of the Chief Economist

Diagram of a Commodity Index Swap

Swap Diagram Example

Pension Fund



Percentage Change in S&P-GSCI Total Return

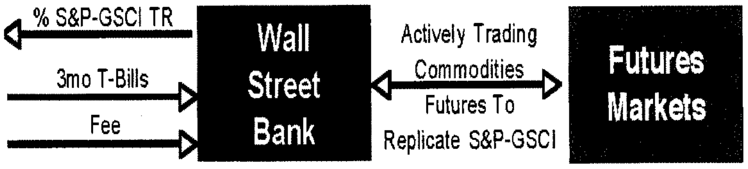
3mo T-Bills

Per annum hedge management fee

Wall Street Bank

Swap Diagram Example *(continued)*

Pension Fund



% S&P-GSCI TR

3mo T-Bills

Fee

Wall Street Bank

Actively Trading Commodities Futures To Replicate S&P-GSCI

Futures Markets

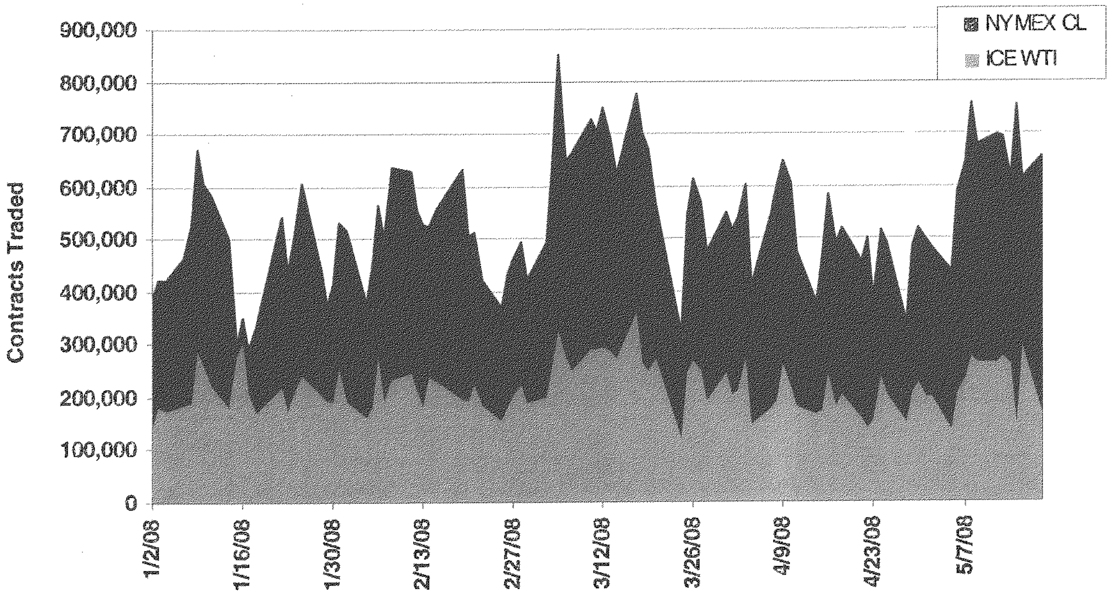
Source: Michael Masters

ICE WTI vs. NYMEX WTI

Total Contracts Traded

January 2, 2008- May 19, 2008

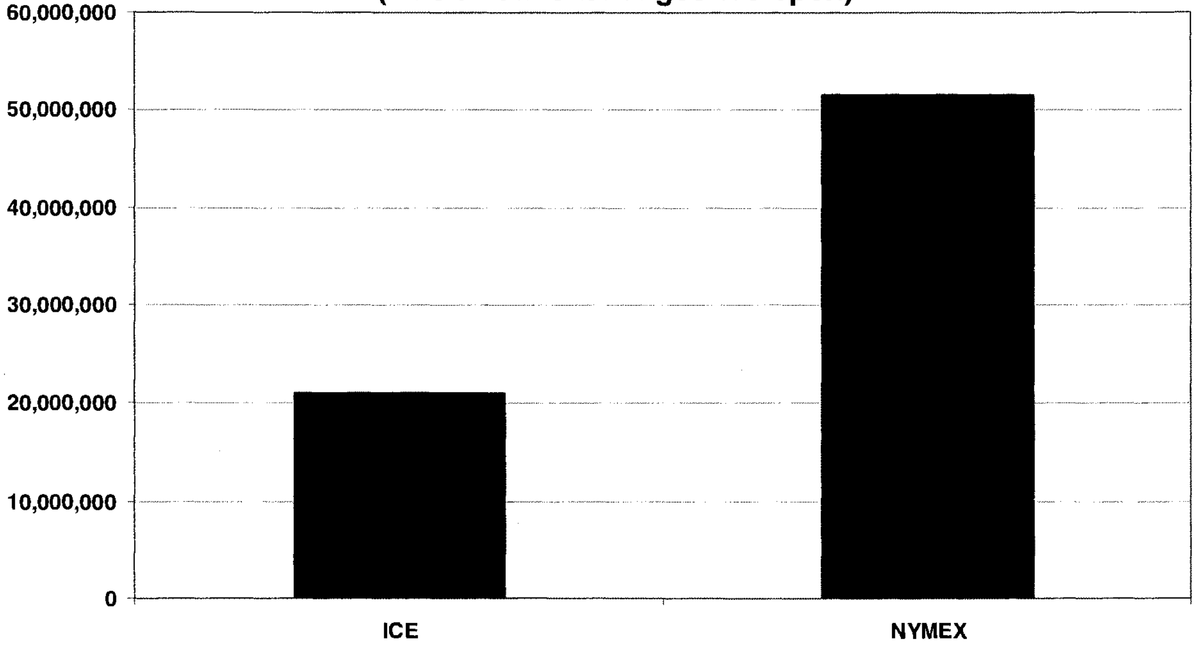
(When both exchanges open)



Source: CFTC Data

ICE WTI vs. NYMEX WTI

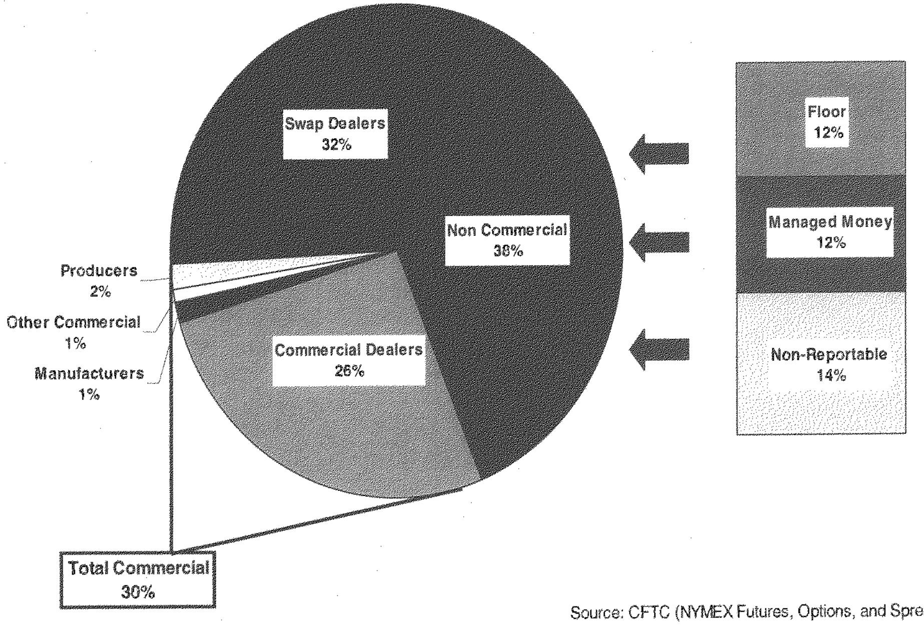
Total Contracts Traded
January 2, 2008 – May 19, 2008
(when both exchanges are open)



Source: CFTC Data

WTI Average Open Interest for April 2008 on NYMEX

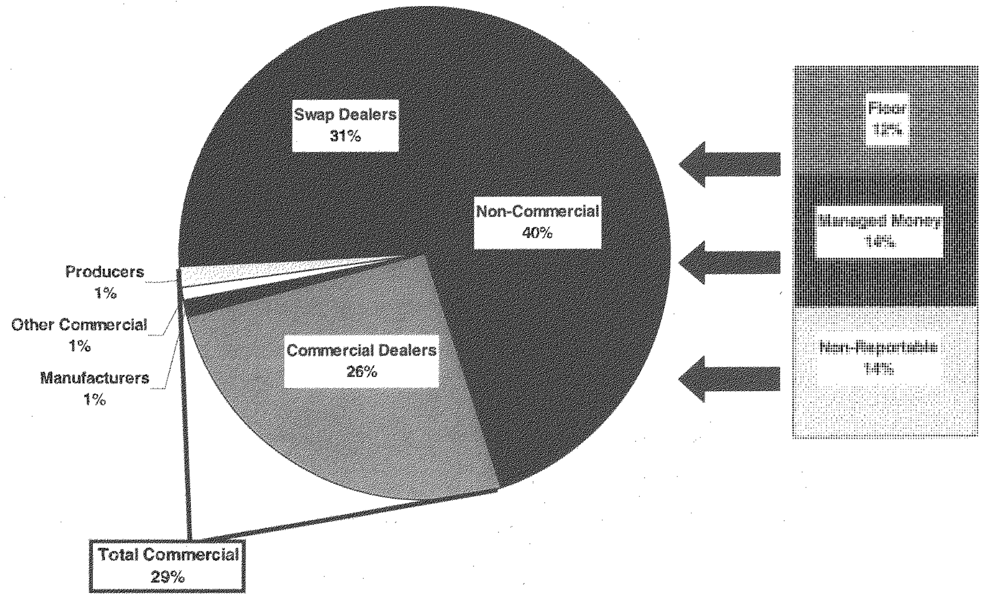
Long & Short Positions



Source: CFTC (NYMEX Futures, Options, and Spreads Data)

WTI Average Open Interest for April 2008 on NYMEX

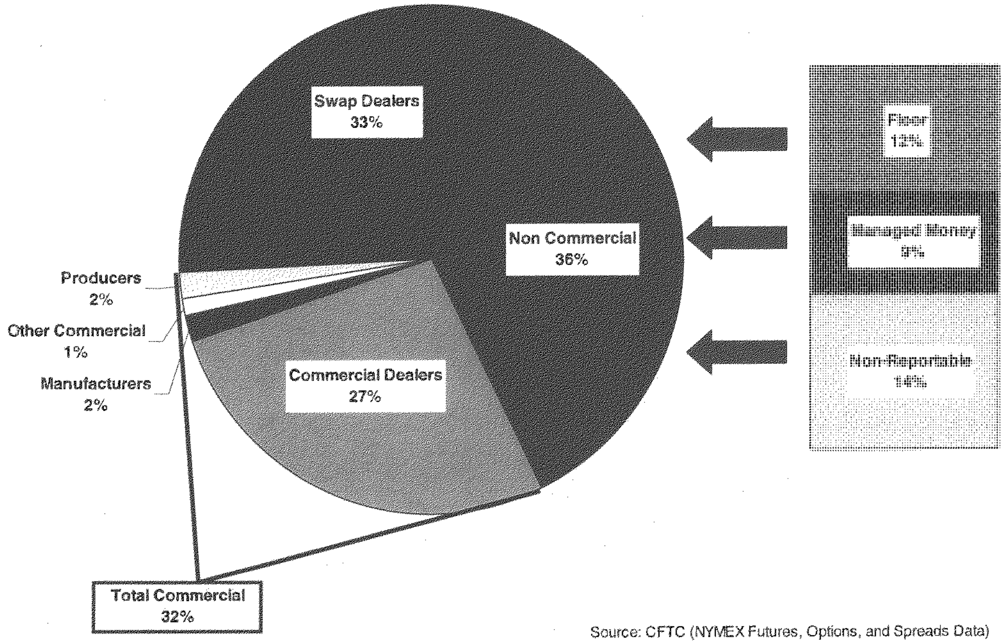
Long Positions



Source: CFTC (NYMEX Futures, Options, and Spreads Data)

WTI Average Open Interest for April 2008 on NYMEX

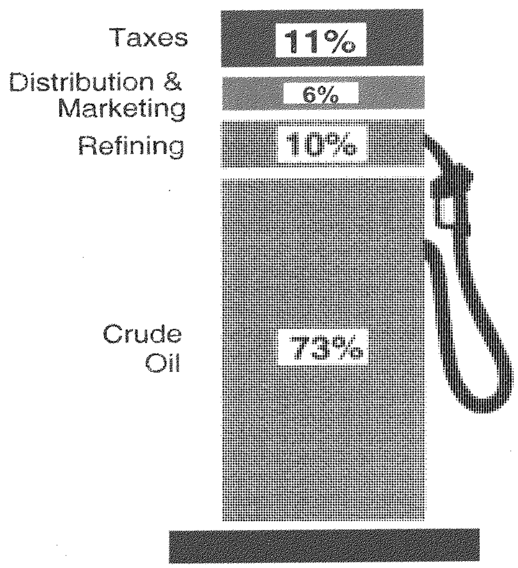
Short Positions



Source: CFTC (NYMEX Futures, Options, and Spreads Data)

What We Pay for at the Pump for a Gallon of Regular Gasoline?

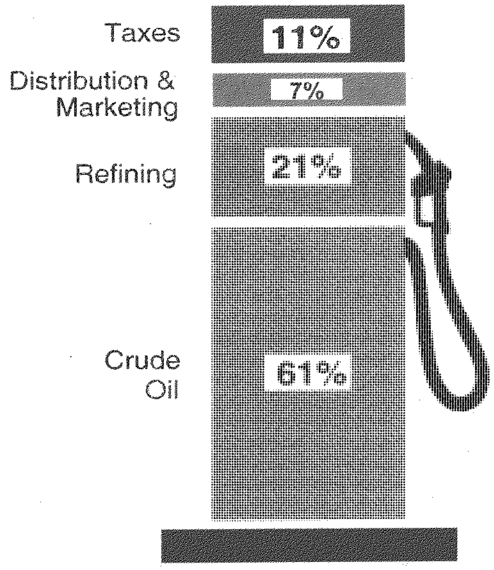
April 2008
Retail Price: $3.46/gallon



Source: Energy Information Administration

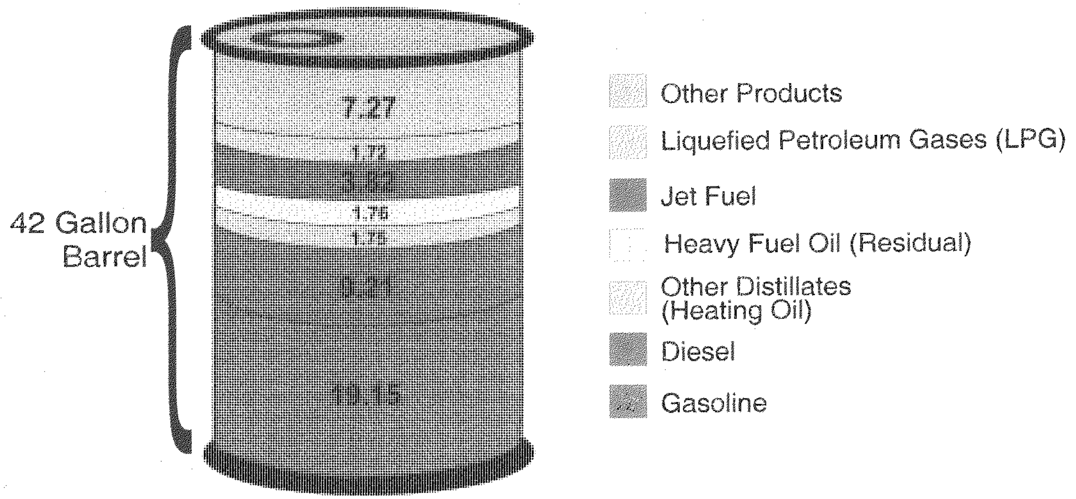
What We Pay for at the Pump for a Gallon of Diesel

April 2008
Retail Price: $4.08/gallon



Source: Energy Information Administration

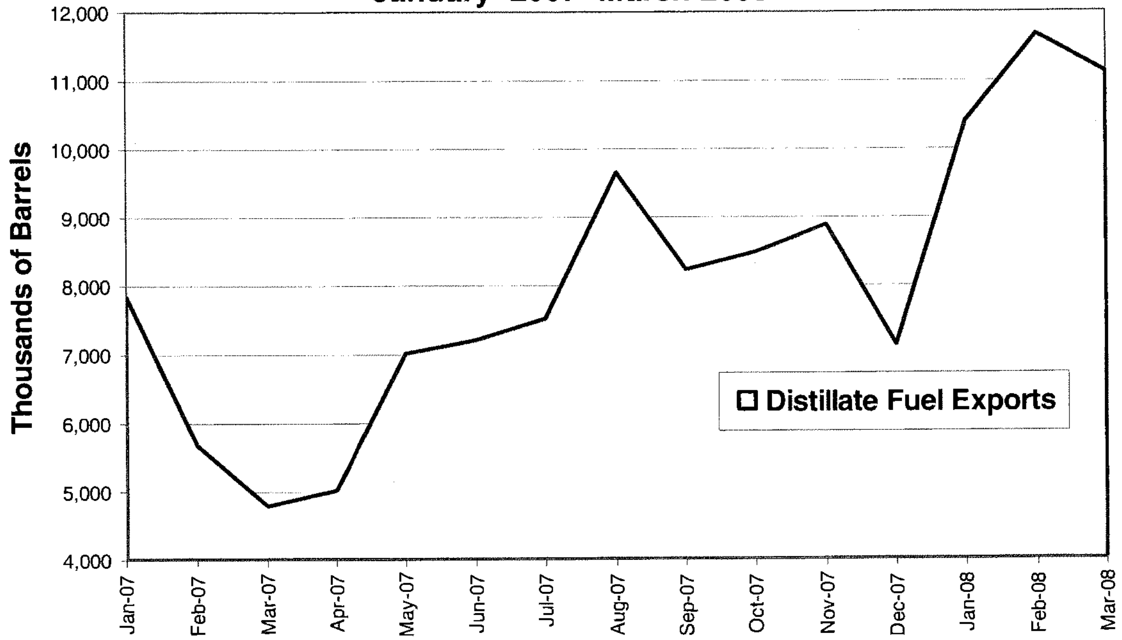
Products Made From A Barrel of Crude Oil
(Unit of Measure: Gallons)



Source: Energy Information Administration
(The total is greater than 42 gallons due to processing gain.)

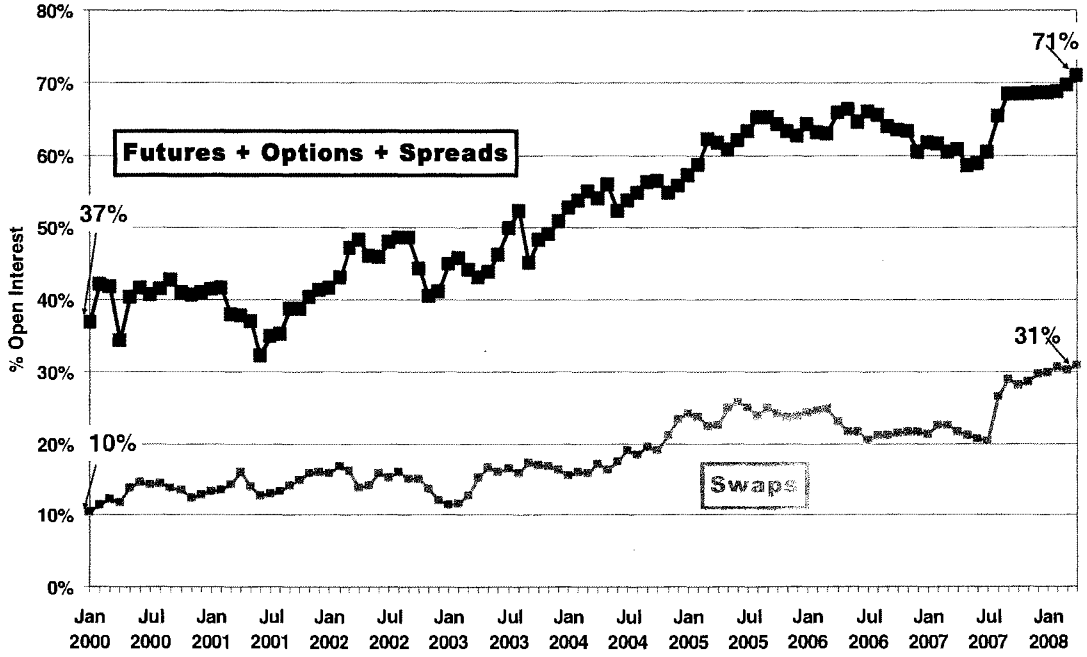
Distillate Fuel Exports

January 2007- March 2008



Source: EIA

The Rise of Speculation
WTI Open Interest on NYMEX (Long)
January 2000 - April 2008

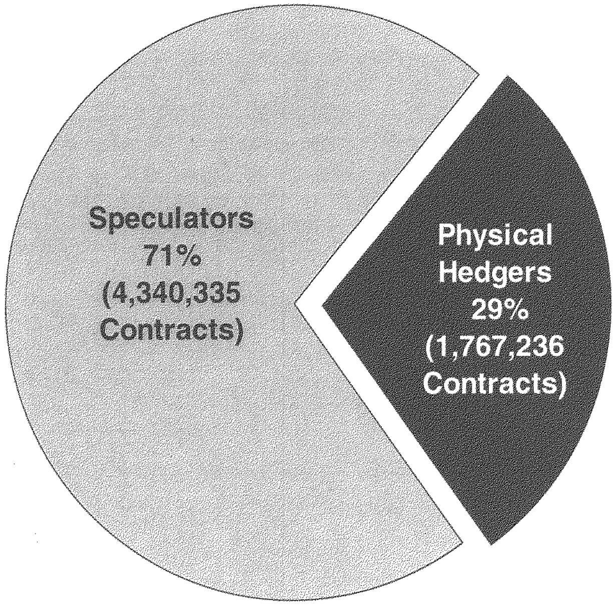


Source: CFTC Data, Office of the Chief Economist

Average Open Interest for WTI Contract

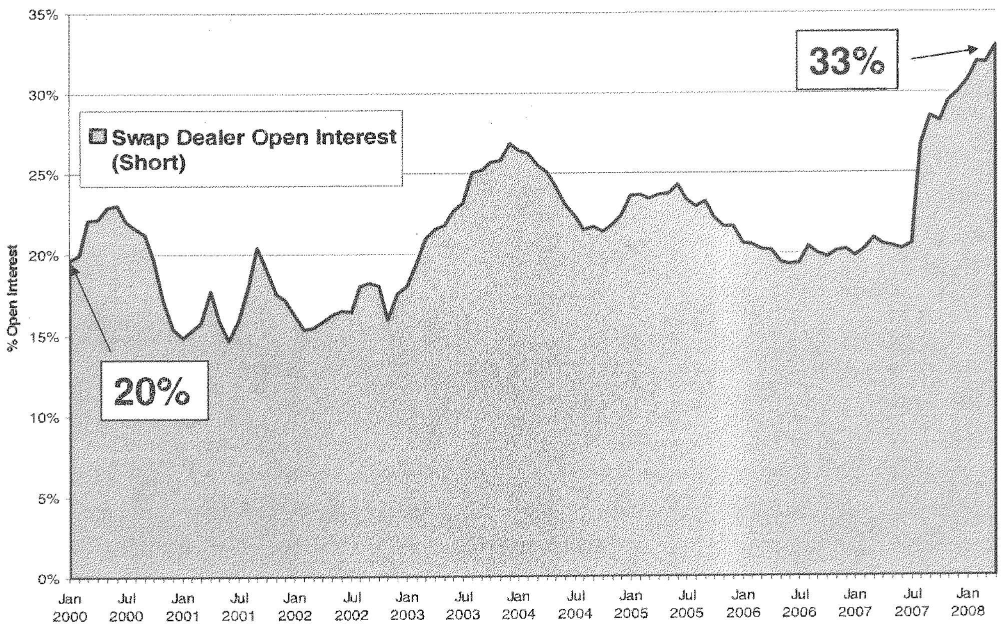
(All months During April 2008)

NYMEX and ICE Futures Europe



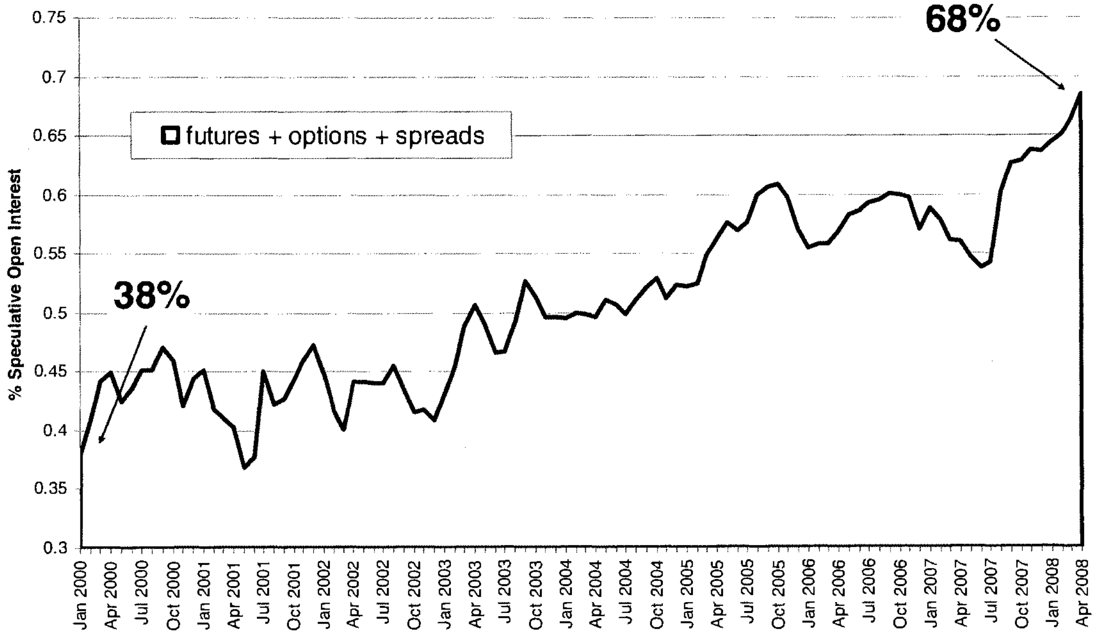
Source: Estimates from CFTC (NYMEX Futures, Options, and Spreads Data);
ICE Futures www.theice.com
*Long and short positions

Swap Dealer Growth
WTI Open Interest on NYMEX (Short Positions)
January 2000- April 2008



Source: CFTC Data, Office of the Chief Economist

The Rise of Speculation as a Percentage of Open Interest on the NYMEX WTI Contract January 2000- April 2008

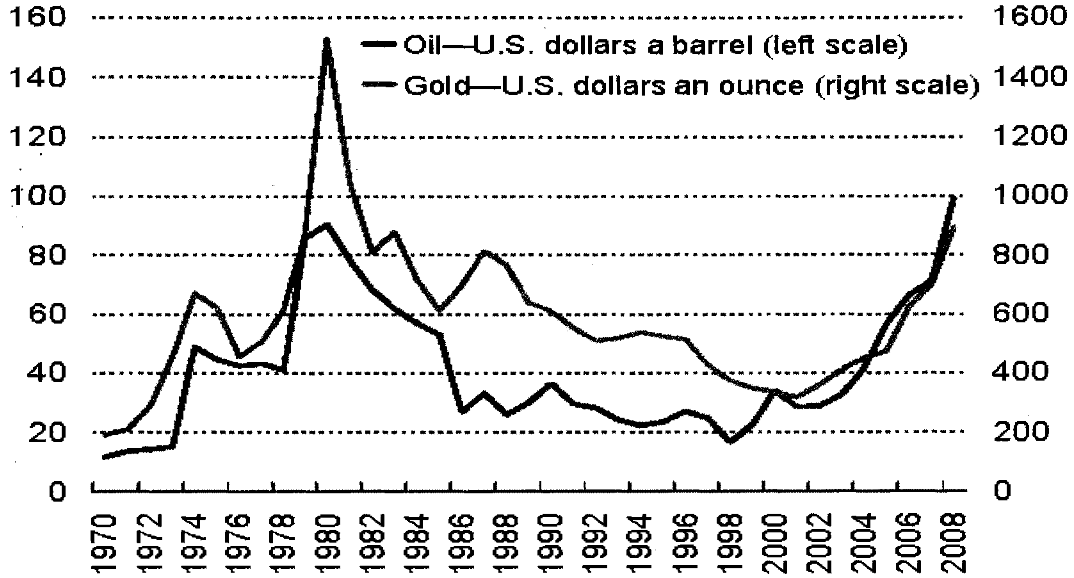


Source: CFTC Data, Office of the Chief Economist

Short Positions Only

Figure B7.2. Oil and Gold Prices Deflated by U.S. CPI

(Base year = 2007)



Source: IMF, *World Economic Outlook*.

Stop Enabling The Speculators
NPR Marketplace June 18, 2008

Commentator Robert Reich says while speculation is driving commodity markets up, the blame rests with the government and regulators who haven't taken the proper steps to reign them in.

Bob Moon: You've heard us talk about the efforts of federal regulators to reign in the speculation in the commodities market. Oil futures regulators in Britain and the U.S. have now come to an agreement. They'll plug what's referred to as the London Loophole that allows traders to step around regulations.

Commentator and economist Robert Reich has taken a look at all the factors at play in the speculation market. He says the problem isn't the speculators, it's the enablers.

Robert Reich: If it were just supply and demand, gas would probably be selling for around $3.50 a gallon, not $4, and food would be 20 percent cheaper. The difference is due to speculation.

Of course, all markets are speculative to some degree. Every time we purchase a share of stock, we're speculating. Problems occur when prices are bid upward not because underlying values are rising but because investors expect other investors to make the same gamble. This can create a bubble.

And whether it's crude oil or corn, houses or financial derivatives or the stock market before the Great Crash of 1929, speculative bubbles cause huge market disruptions, both when they fill up and when they pop.

Sometimes bubbles are manipulated. Prominent investors who hold certain stocks or commodity futures will publicly predict when those prices will rise, and then they profit when others act on the predictions. Alternatively, certain institutional investors are so large they move the markets, prompting other big investors to make the same move. That's why some members of Congress want to ban large institutions from commodities futures markets or at least limit the size of stakes each investor can hold.

But the biggest speculative bubbles happen when investors don't need to use their own money and can borrow to the hilt for whatever looks promising. That's why margin requirements were imposed on individual investors after the Great Crash, proving that another way to prevent excessive speculation is to require certain minimum levels of collateral.

The failure to require down payments from home buyers when mortgages became dirt-cheap beginning in 2003 contributed to the housing bubble. The failure to require investment banks to risk their own capital when they made risky bets on derivatives led to the credit crisis. So what about minimal collateral for investments in commodities futures like oil?
You see, the problem isn't speculation per se. Whether it's oil or food, financial derivatives or houses, the real problem is the failure of government to curb excessive speculation.

Moon: Robert Reich teaches public policy at the University of California Berkeley.

ISDA® FIA MFA MANAGED FUNDS ASSOCIATION

ICI INVESTMENT COMPANY INSTITUTE® SIFMA Securities Industry and Financial Markets Association THE FINANCIAL SERVICES ROUNDTABLE

June 18, 2008

Dear Senators and Congressmen:

We represent participants in America's financial services sector, including banks and investment firms, investment companies, pension funds, individual retirement accounts, manufacturers and retailers. Our sector of the economy produces 8% of America's GDP and employs 5% of our workers. In fact, the companies and individuals we represent can be found in every city and town across the US.

In recent weeks, you may have heard complaints about speculation in the energy and commodity markets. We are writing to make two basic points:

First, liquid and efficient energy and commodities markets are essential to the economy, and speculators play a crucial role in these markets. As discussed in more detail below, speculators take the risks hedgers want to avoid. Without speculation, consumers would likely pay more for energy and commodities.

Second, some of the drastic proposals to revamp futures market regulation now being discussed would be counter-productive. Those proposals range from an outright ban on speculation in commodities and energy futures markets to higher margin requirements to revocation of important international agreements on cooperation with foreign regulators. They would drive needed speculative capital from our markets to other trading venues that are less accessible to U.S. regulators or generally less transparent. These proposals do not offer realistic responses to markets that are global and linked more and more everyday by nano-second trading technology.

Commodities and energy derivatives markets (including both over-the-counter and exchange traded) provide a valuable means by which businesses and individuals can hedge the risk of adverse movements in commodity prices. America's derivatives exchanges are the largest in the world, and, in recent years, both on and off exchange derivative activity in the U.S. has seen tremendous growth.

These markets are composed of both "hedgers," who are persons seeking to hedge some sort of financial or other risk, and "speculators," who are persons willing to take on that risk in the hope of making a profit. Some hedgers seek to mitigate the risk of price increases and others seek protection from prices falling. Thus hedgers can be found on both sides of the market. Similarly, speculators are not uniformly buyers or sellers in the market, but can also be found on both sides of the market. Speculators perform a very important market function in providing liquidity to the market, making it possible for hedgers to efficiently enter and exit the market and reducing the bid-offer spreads and the transaction costs of all market participants. Both hedgers and speculators are needed for a market to serve its price-discovery function.

Unfortunately, some have confused speculation with manipulation or other abusive market practices. Blaming speculation or any specific trading practice for rising or falling commodity and energy prices without real evidence of wrongdoing is misguided. Those kinds of charges create the very real possibility that speculators will choose to abandon these markets and use their investment dollars elsewhere. Such an exodus threatens the healthy functioning of the markets and the economy.

Our futures markets and commodity regulators already have and utilize significant regulatory authority in the form of speculative position limits, large trader reporting requirements, and special call authority, as well as

market surveillance resources and enforcement powers to prevent, detect and prosecute attempted manipulations. With regard to energy prices in particular, Congress has been active in recent years establishing new authority for a number of federal regulators. For instance in 2005 Congress increased the authority of the Federal Energy Regulatory Commission to pursue wrongdoing in the markets for electricity and natural gas as part of the Energy Policy Act. In 2007 Congress gave the Federal Trade Commission authority to pursue fraud and manipulation in the wholesale market for petroleum products as part of the Energy Independence and Security Act. And just last month Congress substantially increased the Commodity Futures Trading Commission's oversight and regulation of electronic commercial markets as part of the Farm Bill.

In addition to allegations of excess speculation, some have focused on the role of institutional investors in commodity and energy prices. These include investors such as public and private pension funds, investment companies, and commodity index tracking funds. These investors allow average middle class Americans to hedge the risk of rising prices by giving them exposure to commodities, which serves as a hedge against inflation risk. Because of the ability, for example, to protect persons such as retirees or prospective retirees from seeing their assets decline, these types of investments have increased in popularity in recent years.

Some have confused these trading opportunities with rising commodity prices, and sought to limit the ability of institutional investors to access derivatives. If successful these efforts would substantially harm the ability of Americans to protect themselves against inflation and would wrongly limit their investment options in general. Before Congress takes any action to limit the ability of average Americans to protect themselves from inflation in this way, it should make certain that the alleged adverse market effects of these kinds of investments have a real basis in fact.

We applaud Congress' efforts to explore abusive market practices. We fully support efforts to ensure America's commodity markets remain fair, liquid and competitive. To that end we endorse efforts to increase funding for the CFTC. However, we strongly urge caution when it comes to the reform of these markets. Hastily enacted initiatives threaten to undermine these markets at the very time they are most needed and damage them to the detriment of both America's financial competitiveness and our overall economic health. Congress should take great care to ensure that the unintended consequences of any proposed market reforms will not outweigh any potential perceived benefits. A careful, studied and measured approach is critical to these efforts.

Thank you for your consideration.

Sincerely,

International Swaps and Derivatives Association

Futures Industry Association

Managed Funds Association

Investment Company Institute

Securities Industry and Financial Markets Association

The Financial Services Roundtable

Department of Energy
Washington, DC 20585

June 20, 2008

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515-6115

Dear Chairman Dingell:

The Energy Information Administration is pleased to respond to your request for an update of the refinery and diesel situation provided to you on April 21, 2008. Please see the enclosure for this update.

I hope this information is of assistance to you. If you need anything else, please contact me, or your staff may contact Joanne Shore, Senior Analyst, at 202-586-4677.

Sincerely,

Guy F. Caruso
Administrator
Energy Information Administration

Enclosure

cc:
The Honorable Joe Barton
Ranking Member

Printed with soy ink on recycled paper

ENCLOSURE

Introduction

In February 2008, concerns were raised over potential petroleum product price impacts of discretionary run reductions by refiners during January and February. EIA addressed this concern in April 21, 2008, correspondence, describing the market conditions driving refinery operations at that time. Those conditions have persisted since then. In particular, discretionary run reductions beyond the typical seasonal level have occurred in response to a continuing "weak" gasoline market with low wholesale (e.g., spot) gasoline price spreads (the difference between spot gasoline and crude oil price). However, even with the low price spreads, increased crude oil prices continue to drive wholesale and retail gasoline prices to record levels.

In contrast, distillate (diesel and heating oil) spot-price spreads (i.e., product price minus crude oil price) remain very high. Although refineries have limited ability to vary their product mix in the short run, the data indicate yield adjustments were made in response to these increased distillate crack spreads, resulting in increased distillate production over 2007, despite lower refinery inputs and associated lower utilizations.

The remainder of this enclosure elaborates on these issues.

Recent Price Developments

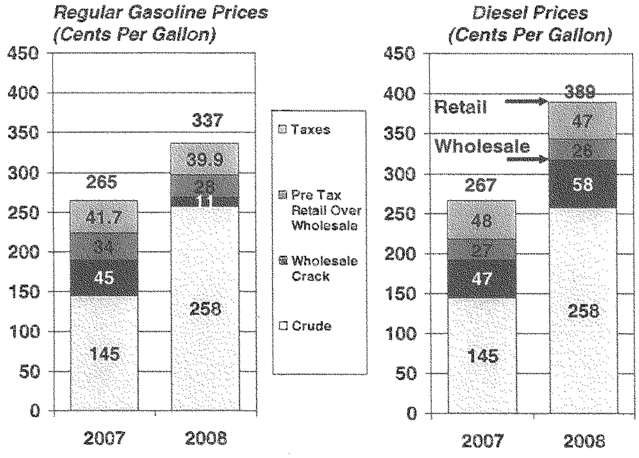
Prices for crude oil, gasoline and diesel continue to set new records. On June 9, the national average price for regular gasoline in EIA's weekly price survey exceeded $4.00 per gallon for the first time. On June 16, the national average price was $4.08, about $1.07 cents higher than at the same time last year (June 18, 2007). Diesel prices have experienced a much greater increase this year. Having passed the $4.00 per gallon mark on April 14, U.S. diesel prices averaged $4.69 on June 16. This is $1.89 higher than prices a year ago (June 18, 2007).

Figure 1 illustrates the basic components of average year-to-date gasoline and diesel prices in relation to their values for the comparable 2007 period. For example, diesel prices averaged $3.89 per gallon from the beginning of this year through mid June. Crude oil, the feedstock for gasoline and diesel, averaged $2.58. Refiners processed the crude oil and received $3.16 per gallon, netting 58 cents per gallon of diesel fuel after crude oil costs. Pipelines, terminal operators, distributors and retailers had about 26 cents to store and move the product to retail stations, and taxes accounted for about 46 cents per gallon. Separating product prices into these components helps to explain different elements of the petroleum market, but keep in mind that crude and product prices are closely related. For example, current strong demand for distillate products is one factor adding pressure to crude prices.

Figure 1 shows that crude oil prices accounted for about $1.14 of the per-gallon increase in year-to-date gasoline and diesel prices over their levels in the comparable 2007 period.

Most recently, during the first half of June 2008, West Texas Intermediate (WTI) crude oil averaged over $130 per barrel or $3.11 per gallon, about twice the $66-per-barrel price during the first half of June 2007.

Figure 1. Average Price Components January through Mid-June: 2007 and 2008



Source: EIA weekly retail prices, Bloomberg average spot prices for Gulf Coast diesel and regular gasoline.

Figure 1 also shows that average year-to-date prices at the wholesale level have been higher for diesel than for gasoline. During the first half of 2007, the diesel crack spread (the difference between wholesale diesel and crude oil prices) averaged about the same as the gasoline crack spread, but in 2008, the average diesel crack spreads expanded significantly over 2007, while the average gasoline crack spread narrowed. The combination of abundant gasoline supply and relatively weak demand depressed gasoline crack spreads this year, causing refiners in the United States and elsewhere to pull back on crude oil inputs. At the same time, world distillate (diesel and heating oil) markets tightened, affecting U.S. diesel and heating oil prices. Although refinery utilization dropped in 2008 as a result of the gasoline market weakness, higher diesel crack spreads led refiners to increase refinery distillate yields (the ratio of distillate output to crude oil input), allowing for increased distillate production in spite of the decline in crude oil inputs.

The rest of this enclosure provides further detail on these developments and discusses EIA's current forecast for the rest of 2008 and 2009.

Crude Oil Prices

As highlighted in EIA's June *Short-Term Energy Outlook*, several factors are combining to cause supply to struggle to keep up with demand growth, thereby accounting for much of the upward trend in oil prices. Consumption in countries outside of the Organization for Economic Cooperation and Development (OECD) continues to grow rapidly, offsetting weaker consumption in OECD countries, especially the United States. Declining production in a number of nations outside of the Organization of the Petroleum Exporting Countries (OPEC), including Mexico, United Kingdom, and Norway, is largely offsetting increases in other countries. Slow growth in non-OPEC supply is coinciding with disruptions in supplies from some OPEC countries, such as Nigeria. Finally, ongoing geopolitical concerns in several oil producing countries, including Venezuela and Iran, have also contributed to oil price volatility.

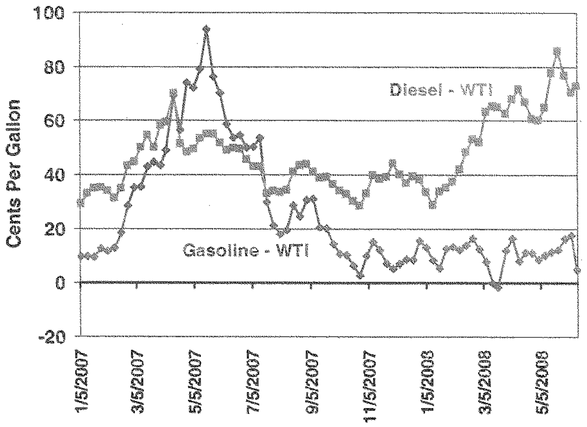
The market remains concerned that the cushion of surplus production capacity (currently less than 2 million barrels per day and almost all located in Saudi Arabia) and/or stocks is insufficient to protect against possible changes in supply or consumption, especially as we enter the summer hurricane season. The absence of a Saudi commitment to add capacity beyond its current goal of 12.5 million barrels per day adds to the uncertainty about the adequacy of future supply capacity growth.

U.S. Gasoline and Diesel Crack Spreads

As noted above, year-to-date crack spreads for diesel and gasoline moved in opposite directions relative to their levels in the comparable 2007 period. Crack spreads are heavily influenced by the supply-demand balance in each product market, including seasonal changes. **Figure 2** shows trends in gasoline and diesel crack spreads since the beginning of 2007. At the start of 2007, both gasoline and diesel markets were tight, and both crack spreads rose during the first quarter. In 2008, however, distillate spreads climbed while gasoline spreads stayed relatively low.

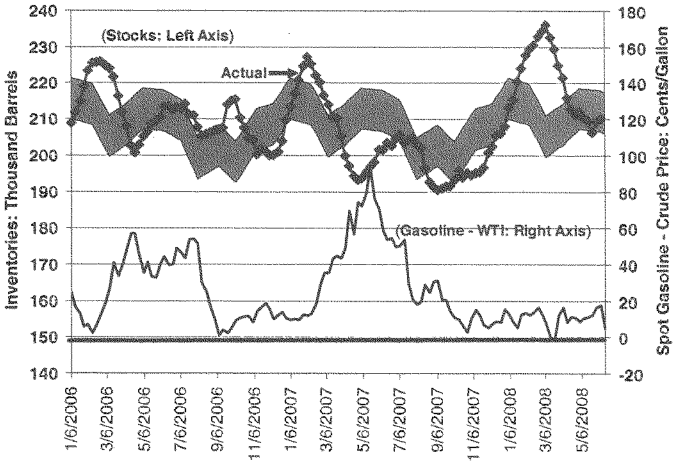
Analysts look at inventory levels as an indicator of the supply-demand balance to assess pressures on wholesale crack spreads. For example, when supply from production and imports is greater than demand, one would expect rising inventories and narrowing crack spreads. This has been the situation in the U.S. gasoline market so far in 2008. The current economic slowdown and high prices are dampening U.S. gasoline demand. First-quarter data indicate gasoline demand in 2008 has declined 1.3% compared to first quarter 2007, but supply did not pull back accordingly. In addition, refiners have been blending more ethanol into gasoline, further reducing the need for gasoline from crude oil. As shown in **Figure 3**, with gasoline supply outpacing demand in January and February, inventories built substantially, peaking in early March. Reflecting this situation, the gasoline crack spread narrowed -- indeed, at some points in March 2008, wholesale gasoline was actually cheaper than crude oil.

Figure 2. Gasoline and Diesel Crack Spreads



Note: The gasoline crack spread is weekly average Gulf Coast regular spot gasoline minus West Texas Intermediate (WTI) crude oil spot price. The diesel crack spread is Gulf Coast ultra-low sulfur diesel minus WTI crude oil spot prices
Source: Bloomberg.

Figure 3. Relationship Between Gasoline Inventories and Gasoline Crack Spread



Note: The colored band indicates normal ranges for total gasoline inventories. The Gasoline Spread is weekly average Gulf Coast regular spot gasoline minus West Texas Intermediate (WTI) crude oil spot price.
Sources: Inventories – EIA *Weekly Petroleum Status Report*; Spot prices – Bloomberg.

In response to this market situation, refiners appear to have reduced crude inputs (and thus utilization) and adjusted their product slate to favor distillate production relative to gasoline. Gasoline inventory declines since early March coincided with reductions in refinery utilization and associated gasoline production and increasing seasonal demand. Yet gasoline crack spreads have not increased much. This, along with the recent up-tick in inventories and availability of gasoline imports, indicates the gasoline market is still well-supplied, holding down incentives for refiners to produce much more gasoline. Had 2008 been a more typical year regarding the supply-demand balance, gasoline crack spreads would have been higher, and retail prices would also have been higher.

Turning to diesel, understanding distillate fuel prices requires looking beyond the United States. World distillate markets have been tight. Diesel demand growth is coming both from increasing transportation use and increasing use as a fuel for electricity generation, particularly in developing countries where electricity demand is outstripping generating capability. On top of this trend, several unusual circumstances are boosting distillate demand further. Chile has been experiencing a severe drought that reduced its hydropower generation, and reduced imports of natural gas from Argentina have caused Chile to turn to more diesel fuel for electricity generation. As a result of these problems, Chile's diesel imports are expected to increase 5-10 percent in 2008 over 2007.[1] China's demand for diesel also continues to increase as it turns to diesel-powered generators to combat shortages, stemming in part from recent earthquake related disruptions of coal and natural gas supplies, and to provide adequate electricity for the Olympic Games this summer. South African mining companies are turning to diesel generators to deal with a power crisis in that part of the world. Even Europe experienced some very tight supplies of ultra-low sulfur diesel this past fall, and the market there remains tight.[2] This very tight international situation is pushing up the price for diesel worldwide, including in the United States.

As a result of strong international diesel demand, the United States has exported more diesel than is typical for this time of year, as shown in **Figure 4.** Both Europe and Latin America purchased unusually high volumes of exports from the United States. Europe imported 81 thousand barrels per day from the United States during the first quarter of 2008, compared to 60 thousand barrels per day first quarter 2007. At the same time, Latin America imported a record monthly volume of distillate from the United States: 241 thousand barrels per day compared to 115 thousand barrels per day in the first quarter of 2007. The increased exports to Chile alone accounted for one third of the first quarter total export increase in 2008 over 2007.

Diesel pressures may ease somewhat from current levels.. In particular, Asian diesel supply pressures could moderate in the coming months as the regional supply situation improves with the recent start of China's 200-thousand-barrel-per-day expansion at Qingdao and the planned start in a month or two of the 600-thousand-barrel-per-day refinery at Jamnagar in India. Latin America's problems may ease a bit as their winter season ends, particularly if Chile sees some drought relief. Still, we expect diesel prices to remain high relative to crude oil for much of this year.

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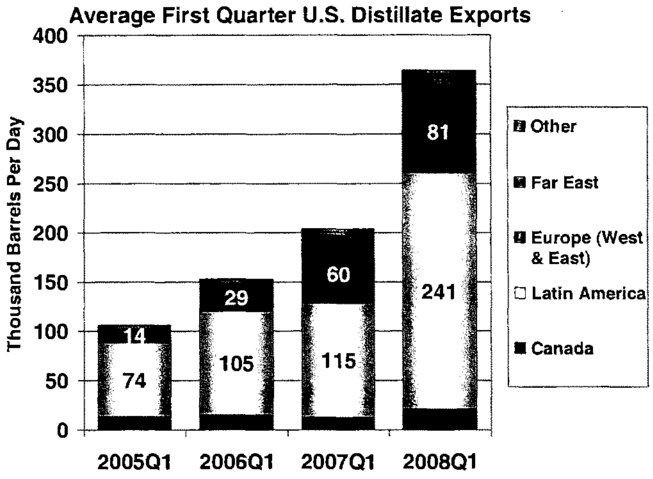
[1] "Reuters Summit-Chile sees higher diesel imports in '08," April 4, 2008, 8:07 pm BST.

[2] "World power crunch tightening diesel market," Reuters, April 29, 2008 16:37.

Figure 4. Distillate Exports, by Destination



Source: EIA

Refinery Utilization

Refiners typically adjust their output of a product either by adjusting the inputs to the refinery, which affects the output of all products, or by adjusting the yield or fraction of a product produced from a barrel of crude oil. While yields cannot be changed much in the short term since they are a function of refinery equipment, small yield shifts among products can still produce a significant swing in volumes. For example, if refinery inputs are at 15.4 million barrels per day (mainly crude oil), a one-percent change in yield is a 154,000-barrels-per-day change in product volume. Both input changes (which affect refinery utilization) and yield changes have been exercised by refiners in 2008 to meet the market conditions.

Normally, refinery utilization (refinery inputs divided by capacity) varies seasonally with demand and maintenance outages. Utilization generally is highest during the summer months of May through August, where the industry frequently averages about 95 percent utilization. In the winter months of January through March, utilization frequently averages closer to 89 percent.

Refinery utilization was lower than typical in the first quarter 2008. Actual first-quarter 2008 utilization averaged 84.7 percent, compared to the average of 89.1 percent during first quarter 2001 through 2005 (years when first quarter volumes were not significantly impacted by hurricanes). In April and May, utilization remained low, averaging 86.1 compared to an average of 94.1 for these two months during 2001-2005. Refinery outages have been normal in 2008, implying that discretionary cutbacks represented a 4- to 5-percent reduction in utilization during the first quarter, and about an 8-percent reduction in April and May. Utilization for the first 2 weeks in June averaged 89 percent, which is about 7 percent lower than average. Gasoline market conditions encouraged discretionary input reductions. With wholesale gasoline prices sometimes selling below the price of crude oil, increased use of ethanol, and plenty of inventory volumes to supply the market, refiners pulled back both on refining inputs and on gasoline yields from crude oil.

Despite the reduction in crude oil inputs and refinery utilization rates from typical levels, distillate production in the first quarter of 2008 exceeded first quarter 2007 levels by 30 thousand barrels per day, which was accomplished by shifts in product yields. Although refiners have limited ability to adjust the relative amounts of products they produce, many refiners made operating changes to increase the amount of distillate produced for each barrel of crude oil that they ran. Distillate refinery yields reached new highs for that time of year, averaging 0.4 percent higher first quarter 2008 over 2007.

During early Spring, refiners typically begin to adjust yields to maximize gasoline production. However, because of the much higher crack spreads for diesel fuel this year, this shift has not occurred. Furthermore, preliminary data indicate distillate yields in the second quarter are near or above historical highs for any month. With very high yields, weekly data indicate refinery distillate production in April and May was about 71 thousand barrels per day higher than in 2007, or more than twice the year-over-year increase seen during the first quarter. This second quarter production increase occurred despite refinery utilization in April and May being lower relative to normal than the first quarter of this year.

In the past, when gasoline crack spreads have been high during the summer months and diesel spreads are lower, refiners increased crude oil inputs and utilization. With crack spreads reversed (i.e., diesel higher than gasoline), why wouldn't refiners increase utilization along with distillate yields? The answer is in the relative volumes of these two products. Finished gasoline, oxygenates, and blending components are 52 percent of refinery inputs, while distillates (heating oil and diesel) represent 26 percent. Therefore, incremental increased refinery inputs would produce about twice the amount of gasoline relative to distillate. Under prevailing market conditions, the extra gasoline would be sold at little or no margin and would exacerbate the imbalance in the gasoline market described above. Instead, as described above, refiners reduced total refinery inputs, and at the same time, shifted some production from gasoline to distillate.

Short-Term Outlook

Crude oil prices are projected to stay high. The overall picture of strong world demand and tight supply is expected to continue. WTI prices, which averaged $72 per barrel in 2007, are projected to average $122 per barrel in 2008 and $126 per barrel in 2009.

Regular-grade gasoline is expected to average $3.78 per gallon in 2008, or 97 cents above the 2007 average price. The U.S. average regular-grade gasoline price, currently over $4 per gallon, is projected to peak at a monthly average of $4.15 per gallon in August. Retail diesel fuel prices are projected to average $4.32 per gallon in both 2008 and 2009, an increase of $1.44 per gallon over the 2007 average. While diesel crack spreads have been unusually high through the first half of 2008, they are expected to ease somewhat in the second half.

June 20, 2008

U.S. Commodity Futures Trading Commission
Three Lafayette Centre, 1155 21st Street, NW, Washington, DC 20581

Walter L. Lukken
Acting Chairman

(202) 418-5014
(202) 418-5550 Facsimile
wlukken@cftc.gov

June 20, 2008

The Honorable John Dingell
Chairman
U.S. House of Representatives
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Bart Stupak
Chairman of the Subcommittee on Oversight and Investigations
U.S. House of Representatives
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Dingell and Subcommittee Chairman Stupak:

Thank you for your June 17, 2008 letter requesting additional information from the Commodity Futures Trading Commission (CFTC or Commission) concerning crude oil trading and related regulatory issues. Attached is the data requested with certain information marked confidential and non-public due to its market sensitivity.

I share your desire for the utmost transparency and integrity in the energy futures markets, and the Commission is devoting all available agency resources to fulfilling our mandate to protect and ensure the integrity of the commodity futures and options markets.

As prices in the energy and agriculture commodity markets have escalated in recent months, the CFTC has pursued an active agenda to ensure that the commodity futures markets are operating free of distortion as the agency looks to better understand the implications of these structural market developments.

As discussed in your letter, the growth of sovereign wealth funds and their collective investment in U.S. markets is an issue of interest to a number of U.S. regulators. The Commission's surveillance staff has not observed any positions of sovereign wealth funds in the data received to date on the ICE Futures Europe crude oil contract. On NYMEX, staff has observed one sovereign wealth fund with reportable positions in crude oil, and unleaded gasoline, and with smaller positions in heating oil, and RBOB gasoline blendstock. If in the future additional sovereign wealth funds were directly to hold reportable positions, they would be identified in the Commission's large trader reporting for NYMEX as well as in the large trader information received from the U.K. Financial Services Authority for the ICE Futures Europe crude oil contract. The agency will continue to monitor and analyze this evolving piece of the marketplace.

In addition, the agency shares your interest in obtaining more information about the possible impact of the recent influx of index traders in the commodity markets. On May 29, 2008, the Commission announced several initiatives to gather additional information from the energy futures markets, including information from index traders and swap dealers. The Commission has issued special calls to swaps dealers requiring them to provide information on their "book" of OTC derivative transactions, including commodity index transactions.

After receiving this data, the Commission's staff will analyze it for a variety of purposes, including whether commodity index traders are properly classified for regulatory and reporting purposes. In addition, if the data includes new information about sovereign wealth fund investments in commodity futures markets that requires further steps, we will act accordingly. The Commission will provide a report to Congress by September 15, 2008 regarding the scope of commodity index trading in the futures markets and recommendations for improved practices and controls, should they be required.

I look forward to the upcoming June 23 hearing with the Energy and Commerce Subcommittee on Oversight and Investigations to discuss these important matters. I appreciate your understanding of the sensitivity surrounding the confidential information provided. Please do not hesitate to contact us if we can be of further assistance, and thank you for your ongoing attention to these important issues.

Sincerely,

Walt L. Lukken

Walt Lukken

cc: The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable John Shimkus, Ranking Member
Subcommittee on Oversight and Investigations

The Honorable Michael Dunn, Commissioner
Commodity Futures Trading Commission

The Honorable Jill Sommers, Commissioner
Commodity Futures Trading Commission

The Honorable Bart Chilton, Commissioner
Commodity Futures Trading Commission

Comparison of the CFTC Core Principles for Derivative Contract Markets

and the FSA Recognition Requirements for Recognized Investment Exchanges[1]

This chart is divided into two columns. The first column identifies a specific CFTC *core principle*. The second column identifies an FSA *recognition requirement* relevant to the CFTC principle in the left column for purposes of comparison. Where an FSA recognition requirement applies to more than one CFTC principle, the FSA provision will appear in multiple places in this chart.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
Core Principle 1 *In General* – To maintain the designation of a board of trade as a contract market, the board of trade shall comply with the core principles specified in this subsection. The board of trade shall have reasonable discretion in establishing the manner in which it complies with the core principles.	The Financial Services Authority (FSA) Handbook sets out guidance on complying with the recognition requirements for UK "recognized bodies" (*i.e.*, recognized investment exchanges (RIE) and recognized clearing houses (RCH) set forth in regulations enacted under the Financial Services and Markets Act 2000. References to the recognition provisions of the Handbook are abbreviated as "Rec." The Handbook is located at: http://fsahandbook.info/FSA/html/handbook/REC/2/1 **Rec. 2.1.2.** These recognition requirements must be satisfied by applicants for recognized body status before recognition is granted and by all UK recognized bodies at all times while they are recognized. In addition the *MiFID implementing requirements* must be satisfied by applicants for *UK RIE* status before recognition is granted and by all *UK RIEs* at all times while they are recognized. The same standards apply both on initial recognition and throughout the period *recognized body* status is held. **Note:** MiFID refers to the EU Commission Regulation (EC) 1287/2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards organizational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive. **Rec. 2.2.1** In considering whether a UK recognized body or applicant satisfies recognition requirements applying to it under these recognition requirements

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[1] This comparative analysis was prepared by CFTC staff and is restricted for use by Commission employees. The views expressed herein do not necessarily reflect the views of the CFTC.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	regulations, the FSA may take into account all relevant circumstances including the constitution of the person concerned and its regulatory provisions and practices within the meaning of section 302(1) of the Act. **Rec. 2.3.9** The FSA recognizes that UK recognized bodies may wish to satisfy the recognition requirements in different ways. The FSA does not prescribe any particular approach to calculating financial resources or to assessing their adequacy. It is willing to discuss with each UK recognized body the most appropriate way for it to meet the recognition requirements and each UK recognized body will need to be able to show the FSA that its financial resources are at all times sufficient to meet the recognition requirement.
Core Principle 2 *Compliance with Rules* – The board of trade shall monitor and enforce compliance with the rules of the contract market, including the terms and conditions of any contracts to be traded and any limitations on access to the contract market.	**Rec. 2.14.1** The UK RIE must ensure that appropriate procedures are adopted for it to make rules, for keeping its rules under review and for amending them. **Rec. 2.15.1** (1) The UK RIE must have - (a) effective arrangements (which include the monitoring of transactions effected on the UK RIE) for monitoring and enforcing compliance with its rules, including rules in relation to the provision of clearing services in respect of transactions other than transactions effected on the UK RIE; . . . (c) effective arrangements for monitoring transactions effected on the UK RIE in order to identify disorderly trading conditions. **Rec. 2.6.1.** The UK RIE must ensure that business conducted by means of its facilities is conducted in an orderly manner and so as to afford proper protection to

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	investors. **Rec. 2.6.2** . . . [t]he UK RIE must ensure that it has transparent and non-discretionary rules and procedures – (i) to provide for fair and orderly trading, and (ii) to establish objective criteria for the efficient execution of orders. **Rec. 2.6.28** In determining whether a UK RIE is ensuring that business conducted by means of its facilities is conducted in an orderly manner (and so as to afford proper protection to investors), the FSA may have regard to the extent to which the UK RIE's rules and procedures: (1) are consistent with the Code of Market Conduct (see MAR 1); (2) prohibit abusive trading practices or the deliberate reporting or publication of false information about trades; and (3) prohibit or prevent: (a) trades in which a party is improperly indemnified against losses; (b) trades intended to create a false appearance of trading activity ("wash trades"); (c) cross trades executed for improper purposes;

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(d) improperly prearranged or pre-negotiated trades; (e) trades intended to assist or conceal any potentially identifiable trading abuse ("accommodation trades"); and (f) trades which one party does not intend to close out or settle. **Rec. 2.10.1** The UK RIE must ensure that- appropriate measures (including the monitoring of transactions effected on the UK RIE) are adopted to reduce the extent to which the UK RIE's facilities can be used for a purpose connected with market abuse or financial crime, and to facilitate their detection and monitor their incidence; **Rec. 2.10.3.** In determining whether a UK recognized body's measures are appropriate to reduce the extent to which its facilities can be used for a purpose connected with market abuse or financial crime, to facilitate their detection and to monitor their incidence, the FSA may have regard to: (1) whether the rules of the UK recognized body enable it to disclose any information to the FSA, or other appropriate bodies involved in the detection, prevention or pursuit of market abuse or financial crime in the United Kingdom or overseas; and (2) whether the arrangements, resources, systems, and procedures of the UK recognized body enable it to: (a) monitor the use made of its facilities so as to obtain information regarding possible patterns of normal,

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	abnormal or improper use of those facilities; (b) detect possible instances of market abuse and financial crime, for example, by detecting suspicious patterns in the use of its facilities; (c) communicate information about market abuse and financial crime promptly and accurately to appropriate organizations; and (d) cooperate with all relevant bodies in the prevention, investigation and pursuit of market abuse and financial crime. **Rec. 2.12.2E** 2. Where the financial instruments concerned are of a kind listed in Sections C (5), (6), (7) or (10) of Annex I to MiFID,[2] point (b) of paragraph 1 shall not apply if the following conditions are satisfied: .... (b) the regulated market must ensure that appropriate supervisory arrangements are in place to monitor trading and settlement in such financial instruments; **Rec. 3.14.2** Where a UK RIE proposes to admit to trading (or to cease to admit to trading) by means of its facilities: (1) a specified investment (other than a security or an option in relation to a security); or (2) a type of security or a type of option in relation to a

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[2] *See* Appendix I for Section C of Annex I to MiFID.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	security; it must give the FSA notice of that event, and the information specified for the purposes of this rule in REC 3.14.6 R to the FSA, at the same time as that proposal is first formally communicated to its members or shareholders (or any group or class of them). **Rec. 3.14.6** The following information is specified for the purposes of REC 3.14.2 R and REC 3.14.3 R [applies to clearing]: (1) a description of the specified investment to which the proposal relates; (2) where that specified investment is a derivative, the proposed terms of that derivative; and (3) in the case of a UK RIE which is admitting that specified investment to trading, the name of any RCH which will provide clearing services in respect of that specified investment under an agreement with that UK RIE.
Core Principle 3 *Contracts Not Readily Subject to Manipulation* – The board of trade shall list on the contract market only contracts that are not readily susceptible to manipulation.	**Rec. 2.12.2A** (2) The rules must ensure that all financial instruments admitted to trading on any regulated market operated by the UK RIE are capable of being traded in a fair, orderly and efficient manner. (3) The rules must ensure that . . .

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(b) all contracts for derivatives admitted to trading on a regulated market operated by the UK RIE are designed so as to allow for their orderly pricing as well as for the existence of effective settlement conditions. (7) The UK RIE must maintain arrangements regularly to review whether the financial instruments admitted to trading on a regulated market operated by it comply with the admission requirements of these instruments. **Derivatives** **Rec. 2.12.2E** (1) When admitting to trading a financial instrument of a kind listed in points 4 to 10 of Section C of Annex I to MiFID,[3] regulated markets shall verify that the following conditions are satisfied: (a) the terms of the contract establishing the financial instrument must be clear and unambiguous, and enable a correlation between the price of the financial instrument and the price or other value measure of the underlying; (b) the price or other value measure of the underlying must be reliable and publicly available; (c) sufficient information of a kind needed to value the derivative must be publicly available; (d) the arrangements for determining the settlement price of the contract must be such that the price properly reflects the price or other value measure of the underlying; (e) where the settlement of the derivative requires or

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[3] *Id.*

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	provides for the possibility of the delivery of an underlying security or asset rather than cash settlement, there must be adequate arrangements to enable market participants to obtain relevant information about that underlying, as well as adequate settlement and delivery procedures for the underlying. (2) Where the financial instruments concerned are of a kind listed in Sections C (5), (6), (7) or (10) of Annex I to MiFID,[4] point (b) of paragraph 1 shall not apply if the following conditions are satisfied: (a) the contract establishing that instrument must be likely to provide a means of disclosing to the market, or enabling the market to assess, the price or other value measure of the underlying, where the price or value measure is not otherwise publicly available; (b) the regulated market must ensure that appropriate supervisory arrangements are in place to monitor trading and settlement in such financial instruments; (c) the regulated market must ensure that settlement and delivery, whether physical delivery or by cash settlement, can be effected in accordance with the contract terms and conditions of those financial instruments.
Core Principle 4 *Monitoring of Trading* – The board of trade shall monitor trading to prevent manipulation, price distortion, and disruptions of the delivery or cash-settlement process.	**Rec. 2.6.1.** The UK RIE must ensure that business conducted by means of its facilities is conducted in an orderly manner and so as to afford proper protection to investors.

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[4] *Id.*

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	Rec. 2.6.2 . . . [t]he UK RIE must ensure that it has transparent and non-discretionary rules and procedures – (i) to provide for fair and orderly trading, and (ii) to establish objective criteria for the efficient execution of orders. **Rec. 2.10.1** [T]he UK RIE must ensure that- appropriate measures (including the monitoring of transactions effected on the UK RIE) are adopted to reduce the extent to which the UK RIE's facilities can be used for a purpose connected with market abuse or financial crime, and to facilitate their detection and monitor their incidence; **Rec. 2.10.3.** In determining whether a UK recognized body's measures are appropriate to reduce the extent to which its facilities can be used for a purpose connected with market abuse or financial crime, to facilitate their detection and to monitor their incidence, the FSA may have regard to: (1) whether the rules of the UK recognized body enable it to disclose any information to the FSA, or other appropriate bodies involved in the detection, prevention or pursuit of market abuse or financial crime in the United Kingdom or overseas; and (2) whether the arrangements, resources, systems, and procedures of the UK recognized body enable it to: (a) monitor the use made of its facilities so as to obtain information regarding possible patterns of normal, abnormal or improper use of those facilities;

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(b) detect possible instances of market abuse and financial crime, for example, by detecting suspicious patterns in the use of its facilities; (c) communicate information about market abuse and financial crime promptly and accurately to appropriate organizations; and (d) cooperate with all relevant bodies in the prevention, investigation and pursuit of market abuse and financial crime. **Rec. 2.15.1** (1) The UK RIE must have - (a) effective arrangements (which include the monitoring of transactions effected on the UK RIE) for monitoring and enforcing compliance with its rules, including rules in relation to the provision of clearing services in respect of transactions other than transactions effected on the UK RIE; . . . (c) effective arrangements for monitoring transactions effected on the UK RIE in order to identify disorderly trading conditions.
Core Principle 5 *Position Limitations or Accountability* – To reduce the potential threat of market manipulation or congestion, especially during trading in the delivery month, the board of trade shall adopt position limitations or position accountability for speculators, where necessary and appropriate.	**Note:** The FSA does not require the establishment of position limits or accountability levels. Rather, it requires all exchanges to ensure that they operate fair and orderly markets. See REC. 2.6.1. and 2. As a means of satisfying those requirements, exchanges are expected to operate market monitoring and supervision functions, the responsibilities of which include position management. As a result, UK exchanges manage positions in their markets on a real time basis and use authority, provided in their rules, to ensure that the exchange members reduce to an acceptable level any

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	positions which potentially jeopardize the orderly and fair operation of their markets. **Rec. 2.6.1.** The UK RIE must ensure that business conducted by means of its facilities is conducted in an orderly manner and so as to afford proper protection to investors. **Rec. 2.6.2** . . . [t]he UK RIE must ensure that it has transparent and non-discretionary rules and procedures – (i) to provide for fair and orderly trading, and (ii) to establish objective criteria for the efficient execution of orders. **Rec. 3.22** Where a UK RIE decides to: (1) restrict the open position on any of the contracts of a member; or (2) issue instructions to a member to close out its positions on any contracts; that UK RIE must immediately give the FSA notice of that event, and the member's name, the nature and size of any position to be restricted or closed out and the reasons for the UK RIE's decision. **Rec. 4.2D.1** (1) [T]he FSA may for the purpose of protecting:

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(a) the interests of investors; or (b) the orderly functioning of the financial markets; require a UK RIE to suspend or remove a financial instrument from trading.
Core Principle 6 *Emergency Authority* –The board of trade shall adopt rules to provide for the exercise of emergency authority, in consultation or cooperation with the Commission, where necessary and appropriate, including the authority to – (A) liquidate or transfer open positions in any contract; (B) suspend or curtail trading in any contract; and (C) require market participants in any contract to meet special margin requirements.	**Rec. 2.17.2** **Paragraph 10 (Default rules in respect of market contracts)** (1) The UK RIE must have default rules which, in the event of a member of the UK RIE being or appearing to be unable to meet his obligations in respect of one or more market contracts, enable action to be taken in respect of unsettled market contracts to which he is party. (2) The default rules may authorize the taking of the same or similar action in relation to a member who appears to be likely to become unable to meet his obligations in respect of one or more market contracts. (3) The default rules must enable action to be taken in respect of all unsettled market contracts, other than those entered into for the purposes of or in connection with the provision of clearing services for the UK RIE. **Paragraph 11 (Content of rules)** (1) This paragraph applies as regards contracts falling within section 155(2)(a) of the Companies Act 1989. (2) The default rules must provide - (a) for all rights and liabilities between those party as principal to unsettled market contracts to which the defaulter is party as principal to be discharged and for there to be paid

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	by one party to the other such sum of money (if any) as may be determined in accordance with the default rules; (b) for the sums so payable in respect of different contracts between the same parties to be aggregated or set off so as to produce a net sum; and (c) for the certification by or on behalf of the UK RIE of the net sum payable or, as the case may be, of the fact that no sum is payable. (3) The reference in sub-paragraph (2) to rights and liabilities between those party as principal to unsettled market contracts does not include rights and liabilities - (a) in respect of margin; or (b) arising out of a failure to perform a market contract. (4) The default rules may make the same or similar provision, in relation to designated non-members designated in accordance with the procedures mentioned in sub-paragraph (5), as in relation to members of the UK RIE. (5) If such provision is made as is mentioned in sub-paragraph (4), the UK RIE must have adequate procedures - (a) for designating the persons, or descriptions of person, in respect of whom action may be taken; (b) for keeping under review the question which persons or descriptions of person should be or remain so designated; and (c) for withdrawing such designation. (6) The procedures must be designed to secure that - (a) a person is not, or does not remain, designated if failure by him to meet his obligations in respect of one or more market contracts would be unlikely adversely to affect the operation of the market; and (b) a description of persons is not, or does not remain, designated if failure by a person of that description to meet his obligations in respect of one or more market contracts would be unlikely adversely to affect the operation of the market. (7) The UK RIE must have adequate arrangements -

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(a) for bringing a designation or withdrawal of designation to the attention of the person or description of persons concerned; and (b) where a description of persons is designated, or the designation of a description of persons is withdrawn, for ascertaining which persons fall within that description. **Rec. 3.15.1** (1) The purpose of REC 3.15.2 R to REC 3.15.5 G is to enable the FSA to obtain information where a UK recognized body decides to suspend the provision of its services in relation to particular investments. Planned changes to the provision of services should be notified to the FSA under REC 3.14. (2) REC 3.15.6 R to REC 3.15.7 R provide for notification to the FSA where a UK recognized body is unable to operate or provide its facilities for reasons outside its control or where it decides to extend its hours of operation in an emergency. **Rec. 3.15.2** Where, for any reason, an RIE: (1) suspends trading in any derivative (other than an option in relation to a security), in any type of security or in any type of option in relation to a security; or (2) temporarily calls a trading halt in respect of any type of security or in any type of option in relation to a security; it must immediately give the FSA notice of that event, particulars of that derivative, type of security or type of option in relation to a security, as the case may be, and the reasons for the action taken.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	Rec. 3.15.2A When a UK RIE suspends trading on a regulated market in any financial instrument, it must immediately give the FSA notice of that event and relevant information including particulars of that financial instrument and the reasons for the action taken. **Rec. 3.15.3** Where a UK recognized body suspends providing clearing services generally in respect of any derivative (other than an option in relation to a security), type of security or type of option in relation to a security, it must immediately give the FSA notice of that event, particulars of that derivative, type of security or type of option in relation to a security, as the case may be, and the reasons for the action taken. **Rec. 3.15.4** Where a UK recognized body suspends any arrangements it makes for the safeguarding and administration of any type of asset belonging to any other person (other than an undertaking in the same group), that UK recognized body must immediately give the FSA notice of that event, particulars of that type of asset and the reasons for the action taken. **Rec. 3.22** Where a UK RIE decides to: (1) restrict the open position on any of the contracts of a member; or (2) issue instructions to a member to close out its positions on any contracts; that UK RIE must immediately give the FSA notice of that event, and the member's name, the nature and size of any position to be restricted or closed out and the reasons for the UK RIE's decision.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	Rec. 4.2D.3 Under section 313C(1) of the Act, if the FSA exercises its power to require a UK RIE to suspend or remove a financial instrument from trading, it must as soon as reasonably practicable: (1) publish its decision in such manner as it considers appropriate; and (2) inform the competent authorities of all other EEA States of its decision. **Rec. 4.5.2** The default rules are designed to ensure that rights and liabilities between the defaulter and any counterparty to an unsettled market contract are discharged, and for there to be paid between the defaulter and each counterparty one net sum. The Companies Act 1989 contains provisions which protect action taken under default rules from the normal operation of insolvency law which might otherwise leave this action open to challenge by a relevant office-holder. **Rec. 4.5.3** The Companies Act 1989 also gives the FSA powers to supervise the taking of action under default rules. Under section 166 of the Companies Act 1989 (Powers of the FSA to give directions) (see REC 4.5.4 G), the FSA may direct a UK recognized body to take, or not to take, action under its default rules. Before exercising these powers the FSA must consult the recognized body concerned. The FSA may also exercise these powers if a relevant office-holder applies to it under section 167 of the Companies Act 1989 (Application to determine whether default proceedings to be taken) (see REC 4.5.9 G).

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	Rec. 4.5.4 **The Companies Act 1989: section 166** The FSA may issue a "positive" direction (to take action) under section 166(2)(a) of the Companies Act 1989: Where in any case a UK RIE or UK RCH has not taken action under its default rules- if it appears to the FSA that it could take action, the FSA may direct it to do so, but under section 166(3)(a) of the Companies Act 1989: Before giving such a direction the FSA shall consult the UK RIE or UK RCH in question; and the FSA shall not give a direction unless the FSA is satisfied, in the light of that consultation that failure to take action would involve undue risk to investors or other participants in the market, The FSA may issue a "negative" direction (not to take action) under section 166(2)(b) of the Companies Act 1989: Where in any case a UK RIE or UK RCH has not taken action under its default rules - if it appears to the FSA that it is proposing to take or may take action, the FSA may direct it not to do so. but under section 166(3)(b) of the Companies Act 1989: Before giving such a direction the FSA shall consult the UK RIE or UK RCH in question; and the FSA shall not give a direction unless the FSA is satisfied, in the light of that consultation that the taking of action would be premature or otherwise undesirable in the interests of investors or other participants in the market. **Rec. 4.5.5.**

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	The FSA's view is that the exercise of these powers will only be justified in exceptional circumstances. The most likely case in which the FSA would consider exercising them is if there were a need to coordinate action by different UK recognized bodies because, for example: (1) the likelihood of a default may not be apparent to all UK recognized bodies; or (2) there was a need to avoid premature default action by one UK recognized body; or (3) significantly different settlement prices had been fixed by different UK recognized bodies.
Core Principle 7 *Availability of General Information* – The board of trade shall make available to market authorities, market participants, and the public information concerning – (A) the terms and conditions of the contracts of the contract market; and (B) the mechanisms for executing transactions on or through the facilities of the contract market.	**Rec. 2.12.2E** 1. When admitting to trading a financial instrument of a kind listed in points 4 to 10 of Section C of Annex I to MiFID,[3] regulated markets shall verify that the following conditions are satisfied: (a) the terms of the contract establishing the financial instrument must be clear and unambiguous, and enable a correlation between the price of the financial instrument and the price or other value measure of the underlying; (b) the price or other value measure of the underlying must be reliable and publicly available; (c) sufficient information of a kind needed to value the derivative must be publicly available; (d) the arrangements for determining the settlement price of the contract must be such that the price properly reflects the price or other value measure of the underlying; (e) where the settlement of the derivative requires or provides for the possibility of the delivery of an underlying security or asset rather than cash settlement, there must be

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[3] *Id.*

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	adequate arrangements to enable market participants to obtain relevant information about that underlying, as well as adequate settlement and delivery procedures for the underlying. 2. Where the financial instruments concerned are of a kind listed in Sections C (5), (6), (7) or (10) of Annex I to MiFID,[6] point (b) of paragraph 1 shall not apply if the following conditions are satisfied: (a) the contract establishing that instrument must be likely to provide a means of disclosing to the market, or enabling the market to assess, the price or other value measure of the underlying, where the price or value measure is not otherwise publicly available; (b) the regulated market must ensure that appropriate supervisory arrangements are in place to monitor trading and settlement in such financial instruments; (c) the regulated market must ensure that settlement and delivery, whether physical delivery or by cash settlement, can be effected in accordance with the contract terms and conditions of those financial instruments. **Rec. 2.6.2** . . . [t]he UK RIE must ensure that it has transparent and non-discretionary rules and procedures – (i) to provide for fair and orderly trading, and (ii) to establish objective criteria for the efficient execution of orders. **Rec. 2.12.11** In determining whether appropriate arrangements have been made to make relevant information available to persons engaged in

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[6] *Id.*

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	dealing in specified investments admitted to trading on the UK RIE, the FSA may have regard to: (1) the extent to which members and clients for whom they act are able to obtain information about those specified investments, either through accepted channels for dissemination of information or through other regularly and widely accessible communication media, to make a reasonably informed judgment about the value and the risks associated with those specified investments in a timely fashion; (2) what restrictions, if any, there are on the dissemination of relevant information to the UK RIE's members and clients for whom they act; and (3) whether relevant information is or can be kept to restricted groups of persons in such a way as to facilitate or encourage dealing in contravention of the Code of Market Conduct (see MAR 1). **Rec. 3.14.2** Where a UK RIE proposes to admit to trading (or to cease to admit to trading) by means of its facilities: (1) a specified investment (other than a security or an option in relation to a security); or (2) a type of security or a type of option in relation to a security; it must give the FSA notice of that event, and the information specified for the purposes of this rule in REC 3.14.6 R to the FSA, at the same time as that proposal is first formally communicated to its members or shareholders (or any group or class of them).

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	Rec. 3.14.6 The following information is specified for the purposes of REC 3.14.2 R and REC 3.14.3 R [pertains to clearing]: (1) a description of the specified investment to which the proposal relates; (2) where that specified investment is a derivative, the proposed terms of that derivative; and (3) in the case of a UK RIE which is admitting that specified investment to trading, the name of any RCH which will provide clearing services in respect of that specified investment under an agreement with that UK RIE.
Core Principle 8 *Daily Publication of Trading Information* – The board of trade shall make public daily information on settlement prices, volume, open interest, and opening and closing ranges for actively traded contracts on the contract market.	**Rec. 2.6.3.** The UK RIE must make arrangements for (a) current bid and offer prices for shares and (b) the depth of trading interest in shares at the price which are advertised through its systems to be made available to the public on reasonable commercial terms and on a continuous basis during normal trading hours . . . . **Rec. 2.6.4.** The UK RIE must make arrangements for the price, volume and time of transactions executed in shares to be made available to the public as soon as possible after the time of the transaction on reasonable commercial terms, subject to the requirements contained in Chapter IV of the MiFID regulation.
Core Principle 9 *Execution of Transactions* – The board of trade shall provide a competitive, open, and efficient market and mechanism for	**Rec. 2.7.1.** The UK RIE must ensure that access to the UK RIE's facilities is

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
executing transactions.	subject to criteria designed to protect the orderly functioning of the interests of investors and is in accordance with paragraph 7B. **Rec. 2.6.1.** The UK RIE must ensure that business conducted by means of its facilities is conducted in an orderly manner and so as to afford proper protection to investors. **Rec. 2.6.2.** . . . [t]he UK RIE must ensure that it has transparent and non-discretionary rules and procedures – (i) to provide for fair and orderly trading, and (ii) to establish objective criteria for the efficient execution of orders.
Core Principle 10 *Trade Information* – The board of trade shall maintain rules and procedures to provide for the recording and safe storage of all identifying trade information in a manner that enables the contract market to use the information for purposes of assisting in the prevention of customer and market abuses and providing evidence of any violations of the rules of the contract market.	**Rec.2.9.1** The UK RIE must ensure that satisfactory arrangements are made for recording transactions effected on the UK RIE, and transactions (whether or not effected on the UK RIE), which are cleared or to be cleared by means of its facilities. **Rec. 2.9.3** In determining whether a UK recognized body has satisfactory arrangements for recording the transactions effected on, or cleared or to be cleared by means of, its facilities, the FSA may have regard to: (1) whether the UK recognized body has arrangements for creating, maintaining and safeguarding an audit trail of transactions for at least three years (five years in respect of transactions carried out by members who are not incorporated in the United Kingdom if the UK recognized body is a regulated

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	market); and (2) the type of information recorded and the extent to which the record includes details for each transaction of: (a) the name of the investment (and, if relevant, the underlying asset) and the price, quantity and date of the transaction; (b) the identities and, where appropriate, the roles of the counterparties to the transaction; (c) if the UK recognized body's rules make provision for transactions to be effected, cleared or to be cleared in more than one type of facility, or under more than one part of its rules, the type of facility in which, or the part of its rules under which, the transaction was effected, cleared or to be cleared; and (d) the date and manner of settlement of the transaction.
Core Principle 11 *Financial Integrity of Contracts* – The board of trade shall establish and enforce rules providing for the financial integrity of any contracts traded on the contract market (including the clearance and settlement of the transactions with a derivatives clearing organization), and rules to ensure the financial integrity of any futures commission merchants and introducing brokers and the protection of customer funds.	**Minimum financial standards for investment firms** The FSA Handbook separately imposes capital adequacy standards for investment firms (i.e., similar category as "futures commission merchants" under the CFTC rules). See Prudential Sourcebook for Banks, Building Societies and Investment Firms at: http://fsahandbook.info/FSA/html/handbook/BIPRU. **Financial Resources Available to the Exchange** **Rec. 2.3.1** The UK RIE must have financial resources sufficient for the proper

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	performance of its relevant functions as a UK RIE. **Rec. 2.3.3** In determining whether a UK recognized body has financial resources sufficient for the proper performance of its relevant functions, the FSA may have regard to: (1) the operational and other risks to which the UK recognized body is exposed; (2) if the a UK recognized body acts as a central counterparty or other wise guarantees the performance of transactions in specified investments, the counterparty and market risks to which it is exposed in that capacity; (3) the amount and composition of the UK recognized body's capital; (4) the amount and composition of the UK recognized body's liquid financial assets; (5) the amount and composition of the UK recognized body's other financial resources (such as insurance policies and guarantees, where appropriate); (6) the financial benefits, liabilities, risks and exposures arising from the UK recognized body's connection with any person , including but not limited to, its connection with: (a) any undertaking in the same group as the UK recognized body; (b) any other person with a significant shareholding or stake in the UK recognized body;

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(c) any other person with whom the UK recognized body has made a significant investment whether in the form of equity, debt, or by means of any guarantee or other form of commitment; (d) any person with whom it has a significant contractual relationship. (7) in relation to a UK RIE, the nature and extent of the transactions concluded on the UK RIE **Settlement and Clearing Services** **Rec. 2.8.1** [T]he UK RIE must ensure that - satisfactory arrangements which comply with paragraph 7D are made for securing the timely discharge (whether by performance, compromise or otherwise) of the rights and liabilities of the parties to transactions effected on the UK RIE (being rights and liabilities in relation to those transactions); **Rec. 2.8.1A** (1) The rules of the UK RIE must permit a user or member of a regulated market operated by it to use whatever settlement facility he chooses for a transaction. (2) Sub-paragraph (1) only applies where - (a) such links and arrangements exist between the chosen settlement facility and any other settlement facility as are necessary to ensure the efficient and economic settlement of the transaction; and (b) the UK RIE is satisfied that the smooth and orderly

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	functioning of the financial markets will be maintained. **Rec. 2.8.3** In determining whether there are satisfactory arrangements for securing the timely discharge of the rights and liabilities of the parties to transactions, the FSA may have regard to the UK recognized body's: (1) rules and practices relating to clearing and settlement; (2) arrangements for matching trades and ensuring that the parties are in agreement about trade details; (3) arrangements for making deliveries and payments and, where relevant, for collecting margin and holding collateral, in all relevant jurisdictions; (4) procedures to detect and deal with the failure of a member to settle in accordance with its rules; (5) arrangements for taking action to settle a trade if a member does not settle in accordance with its rules; (6) arrangements for monitoring its members' settlement performance; and (7) (where appropriate) default rules and default procedures. **Custody of Assets** **Rec. 2.11.1** The UK RIE must ensure that where the UK RIE's facilities include making provision for the safeguarding and administration of assets

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	belonging to users of those facilities, satisfactory arrangements are made for that purpose. **Rec. 2.11.3** In determining whether a UK recognized body has made satisfactory arrangements for the safeguarding and administration of assets belonging to the users of its facilities, the FSA may have regard to: (1) the level of protection which the arrangements provide against the risk of theft or other types or causes of loss; (2) whether the arrangements ensure that assets are only used or transferred in accordance with the instructions of the owner of those assets or in accordance with the terms of the agreement by which the UK recognized body undertook to safeguard and administer those assets; (3) whether the arrangements ensure that the assets are not transferred to the UK recognized body or to any other *person* to settle the debts of the owner (or other person with the appropriate rights over the assets) except in accordance with valid instructions from a persons entitled to give those instructions, or in accordance with the terms of the agreement by which the UK recognized body undertook to safeguard and administer those assets; (4) whether the arrangements include satisfactory procedures to ensure that any rights arising in relation to the assets held as a result of any actions by the issuers of those assets (or other relevant persons) are held, transferred or acted upon in a timely and accurate manner in accordance with the instructions of the owner of those assets or in accordance with the terms of the agreement by which the UK recognized body undertook to safeguard

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	and administer those assets; (5) whether there are adequate arrangements to ensure the proper segregation of assets belonging to the UK recognized body (or to undertakings in the same group) from those belonging to the users of its facilities for the safeguarding and administration of assets; (6) whether the arrangements include satisfactory procedures for the selection, oversight and review of custodians or sub-custodians used to hold the assets; (7) whether the agreements by which the UK recognized body undertakes to safeguard and administer assets belonging to users of its facilities include appropriate information regarding the terms and conditions of that service and the obligations of the UK recognized body to the user of the service and of the user of the service to the UK recognized body; (8) whether the records kept of those assets and the operation of the safeguarding services provide sufficient accurate and timely information: (a) to identify the legal and beneficial owners of the assets and of any persons who have charges over, or other interests, in the assets; (b) to record separately any additions, reductions and transfers in each account of assets held for safeguarding or administration; and (c) to identify separately the assets owned by (or, where appropriate, on behalf of) different persons, including, where appropriate, the assets owned by

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	members of the UK recognized body and their clients; (9) the frequency of reconciliation of the assets held by (or on behalf of) the UK recognized body with the accounts held with the UK recognized body by the users of its safeguarding and administration services and the extent of the arrangements for resolving a shortfall identified in any reconciliation; and (10) the frequency with which statements of their holdings are provided to the users of the safeguarding and administration services, to the owners of the assets held and other appropriate persons in accordance with the terms of the agreement by which the UK recognized body undertook to safeguard and administer those assets. **Rec. 2.11.4** Where a UK recognized body arranges for other persons to provide services for the safeguarding and administration services of assets belonging to users of its facilities, it will also need to satisfy the recognition requirements in Regulation 6 of the Recognition Requirements Regulations (See Rec 2.2) **Systems and Controls** **Rec. 2.5.1** (1) The UK RIE must ensure that the systems and controls used in the performance of its relevant functions are adequate, and appropriate for the scale and nature of its business. (2) Sub-paragraph (1) applies in particular to systems and controls concerning - **** (b) the assessment, mitigation and management of risks to the

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	performance of the UK RIE's relevant functions]; (c) the effecting and monitoring of transactions on the [UK RIE]; the technical operation of the [UK RIE} including contingency arrangements for disruption to its facilities;; and *** e) (where relevant) the safeguarding and administration of assets belonging to users of the [UK RIE's] facilities. **Risk management** **Rec. 2.5.6** In assessing a UK recognized body systems and controls for assessing and managing risk, the FSA may also have regard to the extent to which these systems and controls enable the UK recognized body to: (1) identify all the general, operational, legal and market risks wherever they arise in its activities; (2) measure and control the different types of risk; (3) allocate responsibility for risk management to persons with appropriate knowledge and expertise; and (4) provide sufficient, reliable information to key individuals and, where relevant, the governing body of the UK recognized body. **Counterparty risk** **Rec. 2.5.7** Where the UK recognized body assumes significant counterparty

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	risk (for example, by acting as a central counterparty), the FSA may also have regard to: (1) the position of the risk management department within the UK recognized body, including its access to the governing body and its relationship with the commercial or marketing departments of the UK recognized body; (2) the frequency with which all exposures and risks incurred by the UK recognized body are monitored against risk or exposure limits or other appropriate control parameters; (3) the frequency with which risk or exposure limits (or other control parameters) are reviewed; (4) the reliability of the arrangements for monitoring and assessing intra-day movements in exposures and risks; (5) the robustness of the arrangements for calculating, collecting and holding margin payments and the allocation of losses; and (6) the arrangements for stress testing of the adequacy of the UK recognized body financial resources to cover its exposures which may arise, for example, with substantial movements in market values or counterparty defaults. **Effecting and Monitoring of transactions and operation of settlement arrangements** **Rec. 2.5.8** In assessing a UK RIE's systems and controls for the effecting and monitoring of transactions, and the systems and controls used by a UK recognized body for the operation of settlement arrangements, the FSA

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	may have regard to the totality of the arrangements and processes through which a transaction is effected, cleared and settled, including: (1) a UK RIE's arrangements under which orders are received and matched, and its arrangements for trade and transaction reporting, and (if relevant) for transmission to a settlement system or clearing house; (2) a UK recognized body's arrangements under which clearing and settlement instructions arising from a transaction are entered into its systems to the point at which any rights or liabilities arising from that transaction are discharged; and (3) the arrangements made by the UK recognized body for monitoring and reviewing the operation of these systems and controls. **Safeguarding and Administration of Assets** **Rec. 2.5.9** In assessing a UK recognized body's systems and controls for the safeguarding and administration of assets belonging to users of its facilities, the FSA may have regard to the totality of the arrangements and processes by which the UK recognized body: (1) records the assets held and the identity of the owners of (and other persons with relevant rights over) those assets; (2) records any instructions given in relation to those assets; (3) records the carrying out of those instructions;

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(4) records any movements in those assets (or any corporate actions or other events in relation to those assets); and (5) reconciles its records of assets held with the records of any custodian or sub-custodian used to hold these assets, and with the records of beneficial or legal ownership of those assets. **Monitoring of trading and settlement** **Rec. 2.12.2E** 2. Where the financial instruments concerned are of a kind listed in Sections C (5), (6), (7) or (10) of Annex I to MiFID,[7] point (b) of paragraph 1 shall not apply if the following conditions are satisfied: .... (b) the regulated market must ensure that appropriate supervisory arrangements are in place to monitor trading and settlement in such financial instruments; **Rec. 2.15.1** (1) The UK RIE must have - (a) effective arrangements (which include the monitoring of transactions effected on the UK RIE) for monitoring and enforcing compliance with its rules, including rules in relation to the provision of clearing services in respect of transactions other than transactions effected on the UK RIE;
Core Principle 12 *Protection of Market Participants* – The board of trade shall establish and enforce rules to protect market participants from abusive practices committed by any party acting as an agent for the participants.	**Financial Crime and Market Abuse** **Rec. 2.10.1** The UK RIE must ensure that appropriate measures (including the

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[7] *Id.*

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	monitoring of transactions effected on the [UK RIE]) are adopted to reduce the extent to which the UK RIE's facilities can be used for a purpose connected with *market abuse* or *financial crime*, and to facilitate their detection and monitor their incidence; **Rec 2.10.3** In determining whether a UK recognized body measures are appropriate to reduce the extent to which its facilities can be used for a purpose connected with market abuse and financial crime, to facilitate their detection and to monitor their incidence, the FSA may have regard to: (1) whether the rules of the UK recognized body enable it to disclose any information to the FSA, or other appropriate bodies involved in the detection, prevention or pursuit of market abuse and financial crime in the United Kingdom or overseas; and (2) whether the arrangements, resources, systems, and procedures of the UK recognized body enable it to: (a) monitor the use made of its facilities so as to obtain information regarding possible patterns of normal, abnormal or improper use of those facilities; (b) detect possible instances of market abuse and financial crime for example, by detecting suspicious patterns in the use of its facilities; (c) communicate information about market abuse and financial crime promptly and accurately to appropriate organisations; and (d) cooperate with all relevant bodies in the prevention, investigation and pursuit of market abuse and financial crime.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	Rec 2.10.4 The law on market abuse and financial crime, including Part VI of the Criminal Justice Act 1988 and the Money laundering regulations, applies to UK recognized bodies. This recognition requirement (and this guidance) does not restrict, diminish or alter the obligations contained in that legislation. **Detection and Monitoring** **Rec. 2.6.1.** The UK RIE must ensure that business conducted by means of its facilities is conducted in an orderly manner and so as to afford proper protection to investors. **Rec. 2.6.2.** . . . [t]he UK RIE must ensure that it has transparent and non-discretionary rules and procedures – (i) to provide for fair and orderly trading, and (ii) to establish objective criteria for the efficient execution of orders. **Rec. 2.15.1** (1) The UK RIE must have - (a) effective arrangements (which include the monitoring of transactions effected on the UK RIE) for monitoring and enforcing compliance with its rules, including rules in relation to the provision of clearing services in respect of transactions other than transactions effected on the UK RIE; . . . (c) effective arrangements for monitoring transactions effected on the UK RIE in order to identify disorderly trading conditions.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(2) Arrangements made pursuant to sub-paragraph (1) must include procedures for - (a) investigating complaints made to the UK RIE about the conduct of persons in the course of using the UK RIE's facilities; and (b) the fair, independent and impartial resolution of appeals against decisions of the UK RIE. (3) Where arrangements made pursuant to sub-paragraph (1) include provision for requiring the payment of financial penalties, they must include arrangements for ensuring that any amount so paid is applied only in one or more of the following ways - (a) towards meeting expenses incurred by the UK RIE in the course of the investigation of the breach in respect of which the penalty is paid, or in the course of any appeal against the decision of the UK RIE in relation to that breach; (b) for the benefit of users of the UK RIE's facilities; (c) for charitable purposes. **Rec. 2.10.1** . . . [t]he UK RIE must ensure that- appropriate measures (including the monitoring of transactions effected on the UK RIE) are adopted to reduce the extent to which the UK RIE's facilities can be used for a purpose connected with market abuse or financial crime, and to facilitate their detection and monitor their incidence; **Rec. 2.10.3.** In determining whether a UK recognized body's measures are appropriate to reduce the extent to which its facilities can be used for a purpose connected with market abuse or financial crime, to facilitate their detection and to

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	monitor their incidence, the FSA may have regard to: (1) whether the rules of the UK recognized body enable it to disclose any information to the FSA, or other appropriate bodies involved in the detection, prevention or pursuit of market abuse or financial crime in the United Kingdom or overseas; and (2) whether the arrangements, resources, systems, and procedures of the UK recognized body enable it to: (a) monitor the use made of its facilities so as to obtain information regarding possible patterns of normal, abnormal or improper use of those facilities; (b) detect possible instances of market abuse and financial crime, for example, by detecting suspicious patterns in the use of its facilities; (c) communicate information about market abuse and financial crime promptly and accurately to appropriate organizations; and (d) cooperate with all relevant bodies in the prevention, investigation and pursuit of market abuse and financial crime.
Core Principle 13 *Dispute Resolution* – The board of trade shall establish and enforce rules regarding [sic] and provide facilities for alternative dispute resolution as appropriate for market participants and any market intermediaries.	**Rec. 2.15.1** (1) The UK RIE must have - (a) effective arrangements (which include the monitoring of transactions effected on the UK RIE) for monitoring and enforcing compliance with its rules, including rules in relation to the provision of clearing services in respect of transactions other than transactions effected on the UK RIE; . . .

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(c) effective arrangements for monitoring transactions effected on the UK RIE in order to identify disorderly trading conditions. (2) Arrangements made pursuant to sub-paragraph (1) must include procedures for - (a) investigating complaints made to the UK RIE about the conduct of persons in the course of using the UK RIE's facilities; and (b) the fair, independent and impartial resolution of appeals against decisions of the UK RIE. (3) Where arrangements made pursuant to sub-paragraph (1) include provision for requiring the payment of financial penalties, they must include arrangements for ensuring that any amount so paid is applied only in one or more of the following ways - (a) towards meeting expenses incurred by the UK RIE in the course of the investigation of the breach in respect of which the penalty is paid, or in the course of any appeal against the decision of the UK RIE in relation to that breach; (b) for the benefit of users of the UK RIE's facilities; (c) for charitable purposes. **Rec. 2.15.5** In assessing whether the arrangements include procedures for the fair, independent and impartial resolution of appeals against decisions of a UK recognized body, the FSA may have regard to at least the following factors: (1) the appeal procedures of the UK recognized body, including the composition and roles of any appeal committees or tribunals, and their relationship to the

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	governing body; (2) the arrangements made to ensure prompt hearings of appeals from decisions made by the UK recognized body; (3) the format, organization and rules of procedure of those hearings; (4) the arrangements made to select the persons to preside over those hearings and to serve as members of any appeal tribunal; (5) the provision for determining whether or not such hearings should be in public; (6) the provision made to enable an appellant to be aware of the procedure at any appeal hearing and to have the opportunity to prepare and present his case at that hearing; (7) the provision made for an appeal tribunal to give an explanation of its decision; (8) the provision for publicity for any appeals or for determining whether or not publicity should be given to the outcome of any appeal. **Rec. 2.16.1.** The UK RIE must have effective arrangements for the investigation and resolution of complaints arising in connection with the performance of, or failure to perform, any of its regulatory functions. . . . . (3)The arrangements must include arrangements for a complaint to be fairly and impartially investigated by a person independent of the UK RIE, and for him to report on

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	the result of his investigation to the UK RIE and to the complainant. (4)The arrangements must confer on the person mentioned in sub-paragraph (3) the power to recommend, if he thinks appropriate, that the UK RIE - (a) makes a compensatory payment to the complainant, (b) remedies the matter complained of, or takes both of those steps. (5)Sub-paragraph (3) is not to be taken as preventing the UK RIE from making arrangements for the initial investigation of a complaint to be conducted by the UK RIE. **Rec. 3.10.1** Where a UK recognized body's complaints investigator has investigated a complaint arising in connection with the performance of, or failure to perform, any of its regulatory functions, and that complaints investigator has made a recommendation in respect of that complaint that the UK recognized body should: (1) make a compensatory payment to any person; or (2) remedy the matter which was the subject of that complaint; the UK recognized body must immediately notify the FSA of that event, and give the FSA a copy of the complaints investigator's report and particulars of his recommendations as soon as that report or those recommendations are available to it.

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
Core Principle 14 *Governance Fitness Standards* – The board of trade shall establish and enforce appropriate fitness standards for directors, members of any disciplinary committee, members of the contract market, and any other persons with direct access to the facility (including any parties affiliated with any of the persons described in this paragraph).	**Rec. 2.4.1** (1) The UK RIE must be a fit and proper person to perform the functions of a UK RIE. (2) In considering whether this requirement is satisfied, the FSA may, without prejudice to the generality of regulation 6(1) take into account all the circumstances, including the UK RIE's connection with any person. (3) The persons who effectively direct the business and operations of the UK RIE must be of sufficiently good repute and sufficiently experience to ensure the sound and prudent management and operation of the financial markets operated by it. (4) The persons who are in a position to exercise significant influence over the management of the UK RIE, whether directly or indirectly must be suitable. **Rec. 2.7.1A** . . . . (3) Rules of the UK RIE about access to, or membership of, a financial market operated by it must permit the UK RIE to give access to or admit to membership (as the case may be) only - (a) an investment firm, (b) a credit institution, or (c) a person who - (i) is fit and proper, (ii) has a sufficient level of trading ability and competence, (iii) where applicable, has adequate organizational arrangements, and (iv) has sufficient resources for the role he is to perform . . . . **Rec. 3.4.1** The purpose of REC 3.4 is to enable the FSA to monitor changes in the arrangements a UK recognized body makes for the carrying out of its relevant functions or for overseeing the work of key individuals or departments responsible for its relevant functions. **Rec. 3.4.2**

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
Core Principle 15 *Conflicts of Interest* – The board of trade shall establish and enforce rules to minimize conflicts of interest in the decision-making process of the contract market and establish a process for resolving such conflicts of interest.	**Rec. 2.5.1A** . . . [t]he UK RIE must ensure that appropriate arrangements are made to - (i) identify conflicts between the interests of the UK RIE, its owners and operators and the interests of the persons who make use of its facilities or the interests of the financial markets operated by it; and (ii) manage such conflicts so as to avoid adverse consequences for the operation of the financial markets operated by the UK RIE and for the persons who make use of its facilities. **Rec. 2.5.10** A conflict of interest arises in a situation where a person with responsibility to act in the interests of one person may be influenced in his action by an interest or association of his own, whether personal or business or employment related. Conflicts of interest can arise both for the employees of UK recognized bodies and for the members (or other persons) who may be involved in the decision-making process, for example where they belong to committees or to the governing body. Conflicts of interest may also arise for the UK recognized body itself as a result of its connection with another person. **Rec. 2.5.15** The FSA may also have regard to the contracts of employment, staff rules, letters of appointment for members of the governing body, members of relevant committees and other key individuals and other guidance given to individuals on handling conflicts of interest. Guidance to individuals may need to cover: (1) the need for prompt disclosure of a conflict of interest to enable others, who are not affected by the conflict, to assist in deciding how it should be managed; (2) the circumstances in which a general disclosure of conflicts

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	of interest in advance of any particular instance in which a conflict of interest arises may be sufficient; (3) the circumstances in which a general advance disclosure may not be adequate; (4) the circumstances in which it would be appropriate for a conflicted individual to withdraw from involvement in the matter concerned, without disclosing the interest; and (5) the circumstances in which safeguards in addition to disclosure would be required, such as the withdrawal of the individual from the decision-taking process, or from access to relevant information. **Rec. 2.5.16** The FSA may also have regard to the arrangements made: (1) for enforcing rules or other provisions applicable to staff and other persons involved in regulatory decisions; and (2) to keep records of disclosures of conflicts of interest and the steps taken to handle them.
Core Principle 16 *Composition of Boards of Mutually Owned Contract Markets* – In the case of a mutually owned contract market, the board of trade shall ensure that the composition of the governing board reflects market participants.	**Rec. 2.5.13** The FSA may have regard to the arrangements a UK recognized body makes to structure itself and to allocate responsibility for decisions so that it can continue to take proper regulatory decisions notwithstanding any conflicts of interest, including: (1) the size and composition of the governing body and relevant committees; (2) the roles and responsibilities of key individuals, especially

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	where they also have responsibilities in other organizations; (3) the arrangements for transferring decisions or responsibilities to alternates in individual cases; and (4) the arrangements made to ensure that individuals who may have a permanent conflict of interest in certain circumstances are excluded from the process of taking decisions (or receiving information) about matters in which that conflict of interest would be relevant. *See also* **FSA letter to Recognized Bodies, June 8, 2007** (stating that normally a majority of the board should be non-executive directors and providing clarity on the definition of an executive director in the context of a corporate group); and **FSA letter to Recognized Bodies, March 31, 2004** (stating that corporate governance will continue to be part of FSA reviews, and encouraging consideration of a "balance" between executives, independents and users in forming the Board).
Core Principle 17 *Recordkeeping* – The board of trade shall maintain records of all activities related to the business of the contract market in a form and manner acceptable to the Commission for a period of 5 years.	**Rec. 2.9.1** The UK RIE must ensure that satisfactory arrangements are made for recording transactions effected on the UK RIE, and transactions (whether or not effected on the UK RIE), which are cleared or to be cleared by means of its facilities. **Rec. 2.9.3** In determining whether a UK recognized body has satisfactory arrangements for recording the transactions effected on, or cleared or to be cleared by means of, its facilities, the FSA may have regard to: (1) whether the UK recognized body has arrangements for creating, maintaining and safeguarding an audit trail of transactions for at least three years (five years in respect of transactions carried out by members who are not incorporated in the United Kingdom if the UK recognized body is a regulated

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	market); and (2) the type of information recorded and the extent to which the record includes details for each transaction of: (a) the name of the investment (and, if relevant, the underlying asset) and the price, quantity and date of the transaction; (b) the identities and, where appropriate, the roles of the counterparties to the transaction; (c) if the UK recognized body's rules make provision for transactions to be effected, cleared or to be cleared in more than one type of facility, or under more than one part of its rules, the type of facility in which, or the part of its rules under which, the transaction was effected, cleared or to be cleared; and (d) the date and manner of settlement of the transaction.
Core Principle 18 *Antitrust Considerations* – Unless necessary or appropriate to achieve the purposes of this Act, the board of trade shall endeavor to avoid – (A) adopting any rules or taking any actions that result in any unreasonable restraints of trade; or (B) imposing any material anticompetitive burden on trading on the contract market.	**Note**: The FSA does not have a specific remit in the area of competition and antitrust. Responsibility for such issues lies in the UK Office of Fair Trading. **Rec. 2.7.1A** **(1)** The UK RIE must make transparent and non-discriminatory rules, based on objective criteria, governing access to, or membership of, its facilities. . . . **(3)** Rules of the UK RIE about access to, or membership of, a financial market operated by it must permit the UK RIE to give access to or admit to membership (as the case may be) only - (a) an investment firm, (b) a credit institution, or (c) a person who - (i) is fit and proper,

CFTC CORE PRINCIPLE	FSA RECOGNITION REQUIREMENT
	(ii) has a sufficient level of trading ability and competence, (iii) where applicable, has adequate organizational arrangements, and (iv) has sufficient resources for the role he is to perform . . . .

Appendix I

Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC

Annex I

List of Services and Activities and Financial Instruments

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Section C Financial Instruments

(1) Transferable securities;

(2) Money-market instruments;

(3) Units in collective investment undertakings;

(4) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to securities, currencies, interest rates or yields, or other derivatives instruments, financial indices or financial measures which may be settled physically or in cash;

(5) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to commodities that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event);

(6) Options, futures, swaps, and any other derivative contract relating to commodities that can be physically settled provided that they are traded on a regulated market and/or an MTF;

(7) Options, futures, swaps, forwards and any other derivative contracts relating to commodities, that can be physically settled not otherwise mentioned in C.6 and not being for commercial purposes, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are cleared and settled through recognized clearing houses or are subject to regular margin calls;

(8) Derivative instruments for the transfer of credit risk;

(9) Financial contracts for differences.

(10) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to climatic variables, freight rates, emission allowances or inflation rates or other official economic statistics that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event), as well as any other derivative contracts relating to assets, rights, obligations, indices and measures not otherwise mentioned in this Section, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are traded on a regulated market or an MTF, are cleared and settled through recognised clearing houses or are subject to regular margin calls.

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ICI INVESTMENT COMPANY INSTITUTE SIFMA Securities Industry and Financial Markets Association THE FINANCIAL SERVICES ROUNDTABLE

June 18, 2008

Dear Senators and Congressmen:

We represent participants in America's financial services sector, including banks and investment firms, investment companies, pension funds, individual retirement accounts, manufacturers and retailers. Our sector of the economy produces 8% of America's GDP and employs 5% of our workers. In fact, the companies and individuals we represent can be found in every city and town across the US.

In recent weeks, you may have heard complaints about speculation in the energy and commodity markets. We are writing to make two basic points:

First, liquid and efficient energy and commodities markets are essential to the economy, and speculators play a crucial role in these markets. As discussed in more detail below, speculators take the risks hedgers want to avoid. Without speculation, consumers would likely pay more for energy and commodities.

Second, some of the drastic proposals to revamp futures market regulation now being discussed would be counter-productive. Those proposals range from an outright ban on speculation in commodities and energy futures markets to higher margin requirements to revocation of important international agreements on cooperation with foreign regulators. They would drive needed speculative capital from our markets to other trading venues that are less accessible to U.S. regulators or generally less transparent. These proposals do not offer realistic responses to markets that are global and linked more and more everyday by nano-second trading technology.

Commodities and energy derivatives markets (including both over-the-counter and exchange traded) provide a valuable means by which businesses and individuals can hedge the risk of adverse movements in commodity prices. America's derivatives exchanges are the largest in the world, and, in recent years, both on and off exchange derivative activity in the U.S. has seen tremendous growth.

These markets are composed of both "hedgers," who are persons seeking to hedge some sort of financial or other risk, and "speculators," who are persons willing to take on that risk in the hope of making a profit. Some hedgers seek to mitigate the risk of price increases and others seek protection from prices falling. Thus hedgers can be found on both sides of the market. Similarly, speculators are not uniformly buyers or sellers in the market, but can also be found on both sides of the market. Speculators perform a very important market function in providing liquidity to the market, making it possible for hedgers to efficiently enter and exit the market and reducing the bid-offer spreads and the transaction costs of all market participants. Both hedgers and speculators are needed for a market to serve its price-discovery function.

Unfortunately, some have confused speculation with manipulation or other abusive market practices. Blaming speculation or any specific trading practice for rising or falling commodity and energy prices without real evidence of wrongdoing is misguided. Those kinds of charges create the very real possibility that speculators will choose to abandon these markets and use their investment dollars elsewhere. Such an exodus threatens the healthy functioning of the markets and the economy.

Our futures markets and commodity regulators already have and utilize significant regulatory authority in the form of speculative position limits, large trader reporting requirements, and special call authority, as well as

market surveillance resources and enforcement powers to prevent, detect and prosecute attempted manipulations. With regard to energy prices in particular, Congress has been active in recent years establishing new authority for a number of federal regulators. For instance in 2005 Congress increased the authority of the Federal Energy Regulatory Commission to pursue wrongdoing in the markets for electricity and natural gas as part of the Energy Policy Act. In 2007 Congress gave the Federal Trade Commission authority to pursue fraud and manipulation in the wholesale market for petroleum products as part of the Energy Independence and Security Act. And just last month Congress substantially increased the Commodity Futures Trading Commission's oversight and regulation of electronic commercial markets as part of the Farm Bill.

In addition to allegations of excess speculation, some have focused on the role of institutional investors in commodity and energy prices. These include investors such as public and private pension funds, investment companies, and commodity index tracking funds. These investors allow average middle class Americans to hedge the risk of rising prices by giving them exposure to commodities, which serves as a hedge against inflation risk. Because of the ability, for example, to protect persons such as retirees or prospective retirees from seeing their assets decline, these types of investments have increased in popularity in recent years.

Some have confused these trading opportunities with rising commodity prices, and sought to limit the ability of institutional investors to access derivatives. If successful these efforts would substantially harm the ability of Americans to protect themselves against inflation and would wrongly limit their investment options in general. Before Congress takes any action to limit the ability of average Americans to protect themselves from inflation in this way, it should make certain that the alleged adverse market effects of these kinds of investments have a real basis in fact.

We applaud Congress' efforts to explore abusive market practices. We fully support efforts to ensure America's commodity markets remain fair, liquid and competitive. To that end we endorse efforts to increase funding for the CFTC. However, we strongly urge caution when it comes to the reform of these markets. Hastily enacted initiatives threaten to undermine these markets at the very time they are most needed and damage them to the detriment of both America's financial competitiveness and our overall economic health. Congress should take great care to ensure that the unintended consequences of any proposed market reforms will not outweigh any potential perceived benefits. A careful, studied and measured approach is critical to these efforts.

Thank you for your consideration.

Sincerely,

International Swaps and Derivatives Association

Futures Industry Association

Managed Funds Association

Investment Company Institute

Securities Industry and Financial Markets Association

The Financial Services Roundtable

Masters Testimony

- "Index speculators flooded the market with $55 billion in first 55 days of the year"
  - This methodology is flawed as most of the increase in assets under management (AUM) is from price appreciation of existing positions, not new net inflows
  - The size of index funds grew by only $15 billion in the first quarter of this year, of which only $2 billion was net new money invested in commodities[1]
  - These investor inflows pale in comparison to the roughly $50 trillion worth of oil markets transactions each year[1]
- While commodity prices have been increasing in general, it is an enormous stretch to say that "index speculators" have driven up commodity prices
  - Although general trend is upward, many commodity prices within the index have decreased this year (e.g., wheat, nickel, zinc) while others are increasing (e.g., corn, crude oil) in line with relative supply and demand fundamentals (see Appendix A)
  - Commodities without any major financial flows, such as cobalt, iron ore, and rice have outperformed major commodity indices (see page 3)
  - While notional investment in commodity products appears to be increasing very rapidly, relative to total crude oil volumes it has been declining (from over .5% in Q2 03 to less than .1% today, see page 4)
- "Index speculators buy futures and then roll their positions by buying calendar spreads – they never sell"
  - Investors reallocate their holdings depending on their perception of the best risk/reward opportunities; if prices drop and other asset classes show more promise, they will sell commodities and buy the other asset class
  - There have actually been net outflows in some commodities recently as asset managers rebalance their portfolios. As prices have risen they have had to sell some of their commodity holdings in order to maintain a fixed % of their total portfolio.

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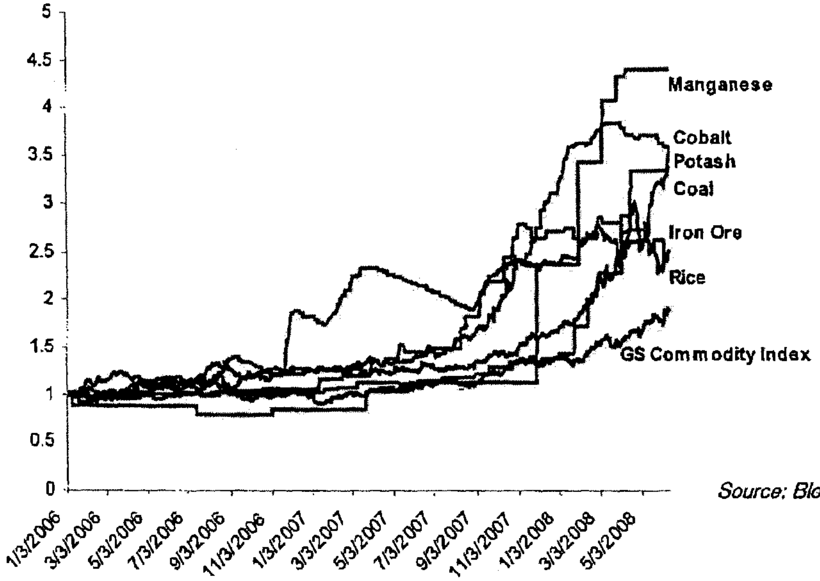
[1] *Figures from The Economist: May31st, 2008*

Many Commodities Without Major Financial Flow Have Outperformed



Source: Bloomberg

- Limited liquidity and transparency in many of these markets has actually led to even more pronounced price spikes compared to more actively traded markets with similar fundamentals

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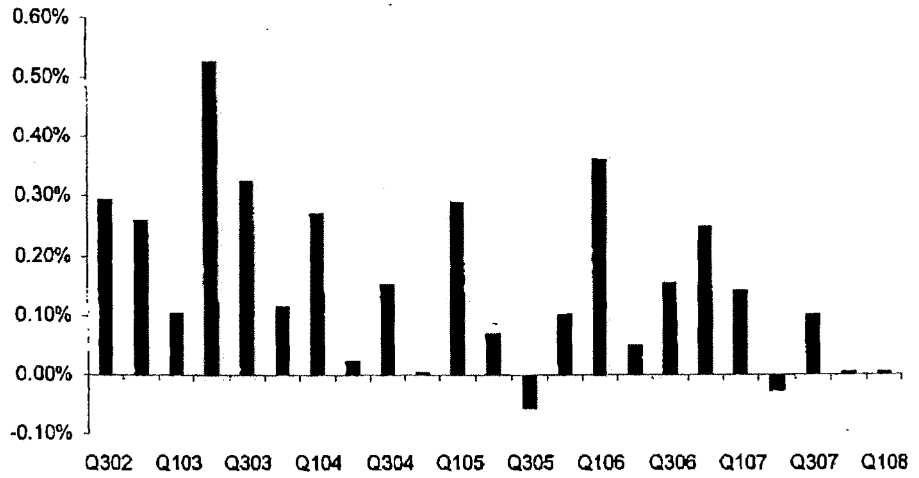
The dollar value of investor money may be increasing, but relative to the total crude oil volumes it has been declining

Total Volume of Investor Inflows In Crude Oil As a Percentage of Total Volumes of NYMEX and ICE WTI Contracts



Source: Nymex, ICE and CS Estimates.

- The volume numbers we use for the oil markets here underestimates the total volume of yearly oil transactions as it does not include swaps, physical trades, or options trades

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ICE restrictions cold comfort for FSA

By Jeremy Grant
Published: June 20 2008 03:00 | Last updated: June 20 2008 03:00

Stuart Fraser, head of policy at the City of London Corporation, says he is "not overly incensed" by moves unveiled this week by US federal regulators to change the way London's oil market is regulated.

But to judge by the language he has been using to defend London's reputation, it is hard to see why, having used phrases such as "American imperialism".

A handful of US senators are convinced that London is a hotbed of speculation in oil markets and that traders might be using London's less tightly regulated markets to speculate in a way that is contributing to record oil prices.

That pressure has forced the Commodity Futures Trading Commission, the US watchdog, to ask the US-based InterContinental Exchange to put greater limits on the positions traders can take in the benchmark West Texas Intermediate crude oil contract on its London-based subsidiary, ICE Futures Europe.

The move, to which ICE has agreed, brings ICE in line with position limit rules in place for trading a similar contract on the New York Mercantile Exchange.

The move has provoked protest from the City of London Corporation, which sees the long arm of US regulation extending across the Atlantic - over the head of the Financial Services Authority.

Mr Fraser says his language was a "deliberately provocative statement" to get people's attention. "It was to say 'we are watching things, and if a bunch of senators want to get rude about the FSA, that's fine, but don't interfere in our market'."

In practical terms, users of London's markets are unlikely to lose much sleep over the change.

Hugo Jenkins, managing director of the Futures and Options Association, says: "I'm not convinced myself that these changes are going to have a significant detrimental impact on volume levels going through ICE."

Some in London argue that the changes would drive trading away to even less regulated markets, such as Dubai.

That is unlikely, since the Dubai Mercantile Exchange - part-owned by Nymex - also plans to apply the same position limits "if and when we list a WTI contract", according to Jim Newsome, Nymex president.

But the political dimensions of the ruckus threaten to damage more than a year of efforts by US regulators to build better relations with their foreign counterparts.

The Securities and Exchange Commission, the CFTC's sister regulator for securities, is pushing a system of "mutual recognition" with other like-minded regulators to make crossborder enforcement more seamless.

And while the FSA has a good working relationship with the CFTC, US politicians have an easy target as long as the UK watchdog approaches oil market oversight differently from the CFTC.

It pursues alleged fraud and manipulation in US energy markets through civil enforcement actions. Its biggest case came last year against BP, the UK energy group.

The FSA has a staff of 50 in "market monitoring". It has two full-time supervisors to "ensure the regulatory requirements imposed on ICE Futures Europe are satisfied".

Yet it operates a different system of "credible deterrence" of wrongdoing by engaging in a dialogue with market participants. Since the FSA's creation in 1997, it has brought no civil or criminal cases in energy markets.

Michael Greenberger, professor of law at the University of Maryland, says: "No matter how you slice and dice it, [the CFTC] has brought many more enforcement actions."

ICE is likely to bring about the change to its oversight through a "rule change". The FSA must now decide whether to put the change out for market consultation - or to consider whether it has grounds to veto the change, under the "Balls clause", introduced by the UK parliament to ring-fence the City from unwanted US regulation.

The FSA said: "We are waiting for ICE to tell us how the rule will look. This [the veto] isn't top

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Futurebuilders England

Global HR Manager - Part Time
Energy

Financial Consultants
Norwich Union

Head of Treasury Risk Management
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Prepared Testimony of
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to

The Permanent Subcommittee on Investigation of the U.S. Senate
Committee on Homeland Security and Governmental Affairs
and
The Subcommittee on Energy of the U.S. Senate
Committee on Energy and Natural Resources

December 11, 2007

Mr. Chairman, members of the Subcommittee on Investigation and the Subcommittee on Energy, it is my pleasure to discuss today developments in world oil markets. In my testimony, I will briefly describe the market changes that have occurred this year and then explore some of the widely cited explanations for these changes. My analysis leads to the following conclusions.

First, the rise in light sweet crude prices to almost $100 per barrel in November came about because the U.S. Department of Energy has been removing a significant share of the daily volume of this type of crude from the market for storage in the Strategic Petroleum Reserve. The volumes have amounted to as much as 0.3 percent of the global supply of light sweet crude available. DOE's actions may have added as much as 10 percent to the light sweet crude price, given the very low estimated price elasticity of demand for crude and the likely even lower price elasticity of demand for light sweet crude. This conclusion is supported by the fact that producers of sour crude oils such as Saudi Arabia have had to institute price cuts of as much as $10 per barrel for sour crude.

Second, prices have been pushed higher because private firms have been reducing inventories. Over the last six months, U.S. refiners liquidated as much as 50 million barrels of crude oil stocks. This liquidation occurred because holding stocks was no longer profitable. The decline in profitability can be traced to the turmoil in financial markets and to greater sophistication on the part of investors who acquire commodities as an asset class. The change in profitability makes it almost impossible for OPEC to inject additional oil into inventories owned by private companies even if commanded to do so by the Secretary of Energy and the International Energy Agency's Executive Director.

Third, light sweet crude demand has been boosted by new environmental regulations requiring the removal of almost all sulfur from diesel fuel sold in the United States, Canada, and Europe. The need to manufacture diesel containing less than 10 parts per million of sulfur for sale to motorists and truckers—and soon other diesel users—creates an operating hurdle for refiners that is more easily met with low-sulfur crudes. This has created added demand for light sweet crude.

Fourth, the price rise cannot be explained by international events such as the dispute between Turkey and the Kurds or concern over Iran's nuclear program. To the contrary, the international scene has become calmer, as demonstrated by the declining American casualty rate in Iraq. All things being equal, prices would have decreased if the only recent change was one experienced in the international arena. As I suggest below, there is no risk premium for crude.

Fifth, the current oil price increase has not been spurred by speculation.

I conclude by suggesting that Congress and the Bush administration could change the current market environment by altering the management of the strategic reserve. A policy where storage of sour crudes is accelerated and stocks of light sweet crudes sold off would allow the United States to fill the strategic reserve faster and relieve some, if not all of, the upward pressure on crude prices. Ultimately, this strategy would leave the U.S. SPR with a billion or more barrels of sour crude that almost all refiners could process. However, it would also require relaxing certain EPA regulations during a severe emergency, as was done after Hurricane Katrina.

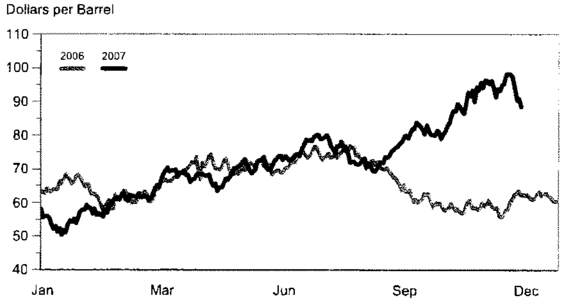
Background

Oil prices in 2007 closely tracked oil prices in 2006 through the first eight months of the year. As can be seen from Figure I (page 3), there was almost no difference in prices between 2006 and 2007 from February 1 to August 15.

I should note that the WTI prices shown in Figure 1 for January 30, 2007, through July 25, 2007, are not the cash prices published by *Platts* or *Petroleum Argus*. Rather, they were generated by taking Dated Brent prices and adding the traditional spread between WTI and Brent of $1 per barrel. The adjustment is required because the Cushing WTI market faced a unique and very local problem from February to July due to a fire that closed Valero's McKee refinery. The McKee refinery is located near the West Texas fields and historically has processed West Texas Intermediate crude. For the managers of that refinery, WTI is not just a paper concept, it is real oil. When fire shut the refinery, Valero reversed a pipeline, injecting more light sweet crude into Cushing and depressing WTI prices by as much as $8 per barrel relative to Brent.

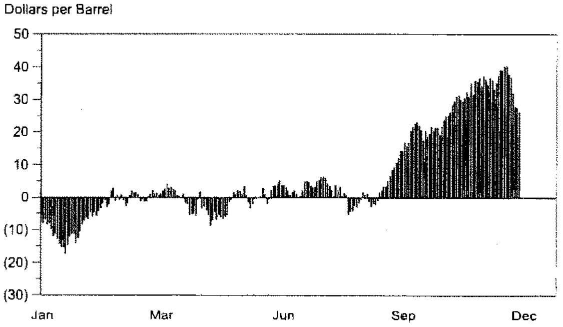
I will add that such market anomalies are not unusual. Wyoming produces a very sweet crude that, due to logistical constraints, goes only to refineries in Colorado and Wyoming. Normally, Wyoming Sweet trades at prices close to WTI. However, in 2006 Wyoming Sweet traded at a discount of as much as $30 per barrel to WTI when a large refinery in Colorado was closed for maintenance.

Figure 1
Daily WTI Prices in 2006 and 2007*



Note: WTI prices between January 30, 2007, and July 25, 2007, have been adjusted to remove the impact of a Valero refinery fire (see text).
Source: Platts, PKVerleger LLC.

Figure 2
Difference between WTI Prices in 2006 and 2007



Source: Platts, PKVerleger LLC.

The message to take from Figure 1 is that 2006 and 2007 markets were very similar until mid-August. After August 20, though, markets changed. Figure 2 captures the magnitude of the shift. The graph shows the difference between prices in 2006 and 2007. By my reckoning, the recent price increase ranks as one of the three or four largest jumps in crude prices over a short period of time in the last 30 years. The other increases of a similar magnitude occurred during the Iranian Revolution, Iraq's invasion of Iran a year later, and Iraq's 1990 invasion of Kuwait. The current increase is that large.

With this background, it is important to ask what happened to oil markets. In other words, what factors can explain the sudden price rise that puts 2007 on par with 1979, 1980, and 1990?

International turmoil does not explain the price rise.

Economic historians looking at these markets 15 or 20 years from now will no doubt begin by trying to find international events that could have triggered the 2007 price rise. They will find a few tidbits. For example, market analysts rushed to cite Turkey's threat to invade the Kurdish area of Iraq as an explanation. Others pointed to rising tensions between the United States and Iran as a cause.

However, these explanations simply do not hold. Turkey's threat to invade Iraq is not on par with Iraq's invasion of Iran. It's not even close. Furthermore, the tensions between the United States and Iran cannot explain an almost 50-percent hike in crude prices. No, the typical blaming of international events does not work this time.

I will go further. Often, one hears analysts speak of a risk premium in oil prices. Today, there is no risk premium. Indeed, I doubt there ever has been a risk premium in the price of oil.

Growing demand in India and China also does not explain the price rise.

Future economic historians seeking to explain the 2007 price increase will likely turn to the prospective consumption growth in China and India as a reason for the oil price surge that began in August. Some will no doubt find that the prospect of smaller increases in output from countries such as Venezuela, Russia, and Kazakhstan added further upward pressure to prices.

These arguments will have great appeal. However, they will fail again because no great revelation regarding China, India, or Russia appeared in August 2007. The Energy Information Administration (EIA), the International Energy Agency (IEA), the National Petroleum Council, and others have been issuing warnings regarding these countries for years. While new information keeps emerging gradually, nothing startling came out this summer. Hence, it is hard to attribute the sudden price boost to oil buyers waking up to the fact that the global economy was expanding and oil use was rising.

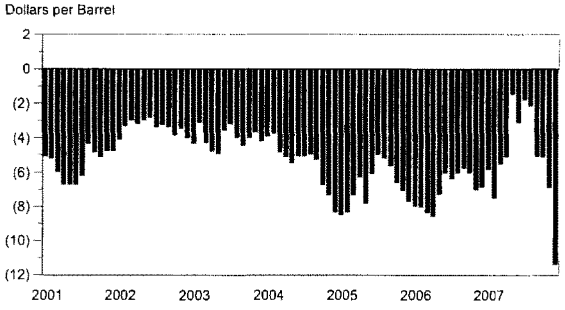
One cannot attribute the price rise to a global crude oil shortage.

It may surprise many to discover that some oil producers have had a difficult time selling their crude this fall. One indication of their problems can be seen in the differential between crude oil sold by Saudi Arabia and WTI. Saudi Arabia prices the crude it sells to U.S. customers off WTI prices. Each month the Saudi oil company, Aramco, announces a differential to WTI for firms buying Saudi crude for delivery to the United States in that month. For example, buyers lifting Arab Light Crude from Saudi Arabia this month will pay the WTI price that prevails 50 days from now less $11.65. (The delay allows for the oil's transit time from Saudi Arabia to the United States.) Aramco adjusts this differential every month to reflect changes in market conditions.

As can be seen from Figure 3 (page 5), the differential set by Saudi Arabia for oil loaded in August was $2.15 per barrel. Five months later, the Saudis boosted the discount to $11.65. As every shopper knows, discounts do not deepen when supplies are tight. Rather, they increase when goods do not sell. Apparently, Saudi Arabia has been having trouble selling its oil.

The repeated hikes in the Saudi discount seem to undercut the calls for OPEC countries to boost production coming from energy officials, such as Secretary Bodman, in consuming countries. The cuts suggest a seller—like a department store—trying to move unattractive product.

Figure 3
Discount Offered for Arab Light Purchased FOB Saudi Arabia for Delivery to U.S. Gulf Coast



Source: Platts, Petroleum Argus.

Speculation does not seem to explain the price rise. To the contrary, "speculation" may have declined as prices rose.

Speculators have been the villains in commodity markets for over 100 years. Williams notes the frequent attack on speculators in agricultural markets in a number of his papers.[1] Even today, one hears again and again of farmers complaining about speculators.

However, to blame speculators is to blame "the man behind the tree," the man who is not really there. (Senator Russell Long of Louisiana often used this line: "Don't tax me; don't tax you; tax the man behind the tree.") Many of market participants who might be described as speculators are really investors—individuals or funds trying to earn a return for themselves or constituents such as retirees. Over the last two decades, an extensive literature on commodities as an asset class has emerged. Experts on finance assert that commodities are an asset class and suggest that investors diversify their portfolio between equities, debt, and commodities. Some large pension funds have gone further. The California Public Employees Retirement System, for example, puts a portion of its assets in physical commodities, and Harvard owns forests in its endowment.

Many investors put money into commodities by purchasing futures, prompted by research that shows that commodity futures outperform equities in firms that own energy and other commodity resources. These investors have been guided by academics such as Gary Gorton and Geert Rouwenhorst.[2] Last December, OPEC and the EU convened a meeting of experts to discuss the impact of this development. I and four other U.S. citizens were invited to speak. Tragically, no official from the U.S. government joined representatives from the IEA, the EU, OPEC, and various governments of OPEC and EU members.

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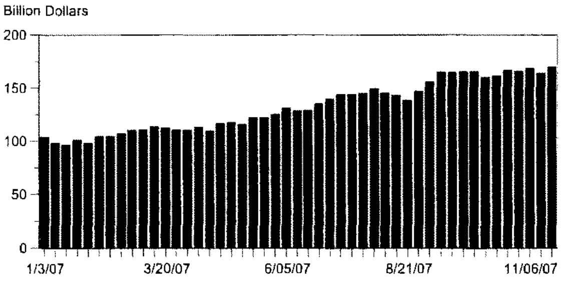
[1] See, for example, Jeffrey C. Williams, *The Economic Function of Futures Markets* (Cambridge, England: Cambridge University Press, 1985).

[2] Gary Gorton and Geert Rouwenhorst, "Facts and Fantasies about Commodity Futures," *Financial Analysts Journal* 62, No. 2 (2006).

However, the Commodity Futures Trading Commission (CFTC) has noted the emergence of commodities as an asset class. Beginning in January, the CFTC has reported data on agricultural futures contracts held by investors. These data allow one to estimate the money invested in commodities—and the money invested in oil futures. In Figure 4, I show the total amount invested in commodities by this new group of participants. The approach used to back into the calculation is explained in Appendix A, which reproduces a report I issued in January.

Figure 4 shows the amount invested in commodities has increased from $100 billion in January to $170 billion at the end of November. Note that most of the growth occurred before the middle of August, that is, before crude prices started their remarkable rise.

Figure 4
Estimated Amount Invested in the Two Principal Commodity Futures Asset Instruments



Note: The two instruments are the S&P GSCI and the Dow Jones-AIG indexes.
Source: PKVerleger LLC.

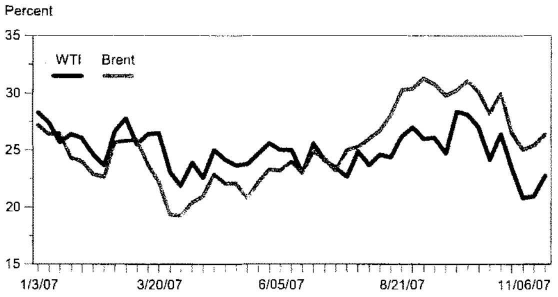
The CFTC data also allow one to calculate the percentage of open interest in crude oil or petroleum product futures contracts held by investors in these commodities. (Again, the basis of the calculation is explained in Appendix A.) Figure 5 (page 7) shows the movement of this percentage from beginning of the year. Note that the share rose during the early summer and then *declined* from the end of September. This suggests that commodity investors had a *diminishing influence on oil prices as prices rose.* This is hardly the empirical result one would expect if speculators were really causing the price increase.

Lastly, we show in Figure 6 (page 7), the rise and fall in open interest in the three principal crude oil futures contracts: NYMEX Light Sweet Crude (also referred to as WTI), ICE Light Sweet Crude, and the International Petroleum Exchange Brent Crude contract. The graph extends from 1991 to November 20, 2007. Data are shown as of each Friday. I note that open interest peaked at the end of September at almost three million contracts and has since dropped to 2.5 million contracts. The decrease in October and November is hardly consistent with a hypothesis that attributes the price rise to speculation. To the contrary, the data seem to exonerate speculators.

Changes in expectations do not explain the price increase.

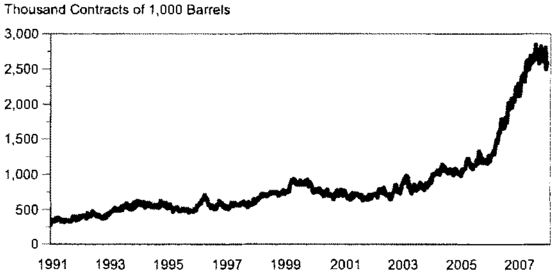
Expectations often determine the actions taken in markets. For example, owners of a nonrenewable resource may be willing to produce for $10 if prices are expected to be $10 in five years. On the other hand, they will be disinclined to produce today if prices in five years are expected to be $100. Instead, they may well sell future production for $100 and wait. In such circumstances, consumers will bid up current prices to a level that will encourage output if the production is needed.

Figure 5
Percentage of Open Interest in WTI and Brent Futures Accounted for by Investment in Two Principal Commodity Indices



Source: PKVerleger LLC.

Figure 6
Total Open Interest in Three Principal Crude Futures Contracts, January 1991 to November 2007



Note: The three contracts are the NYMEX Light Sweet Crude contract, the ICE Sweet Crude contract, and the IPE Brent contract.
Source: NYMEX; ICE; IPE.

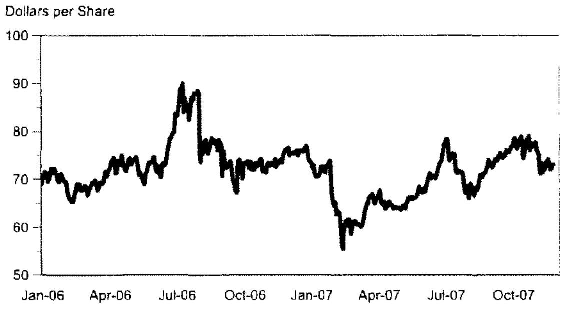
Markets today show good indications of expectations. Share prices of royalty trusts, for example, tend to provide a useful guide to changes in expectations because buyers are paying for a stream of income represented by payments for oil. Under specific circumstances, the share prices of these instruments represent an unbiased view of the likely trend in future prices. Furthermore, increases in these share prices will indicate changes in expectations that may require increases in cash prices.

One widely observed instrument is the BP Prudhoe Bay Royalty Trust (BPT). The trust was created in 1989 by BP. Its shareholders receive 16 percent of the first 90,000 barrels per day of royalty production from the Prudhoe Bay Unit. Movement in share prices measures the shifts in market expectations of future oil prices. Empirical research has demonstrated that predictions derived from the trust have been systematically more accurate than projections generated by other approaches, including those employed by DOE. This finding is not surprising because those investing in the trust have more at stake financially than model builders do.

Figure 7 shows the daily movement in the BPT share price from January 2006 through November 28, 2007. Inspecting these data reveals the absence of any real trend. While detailed modeling of the trust suggests investors expect prices to be slightly higher in, say, 2020 than they did a year ago, the changes are probably within the margin of error. The basic message, then, is that expectations regarding the long-run oil price have not changed much.

This finding may come as a surprise. Recently, the International Energy Agency issued a warning regarding future supply-and-demand imbalances in conjunction with the release of its 2007 *World Energy Outlook*. The study's clear implications were that IEA economists had much different and higher expectations for future prices in 2007 than they did in 2006. Investors do not seem to have reached such a conclusion. As can be seen from Figure 7, BPT share prices have been stable.

Figure 7
Share Price of the BP Prudhoe Bay Royalty Trust as an Indicator of Expections of Long-Run Oil Prices



Source: PKVerleger LLC

Oil company decisions to liquidate stocks may have exacerbated the oil price rise somewhat.

Inventories are the most misunderstood economic phenomenon in the energy business. Time and again, one reads statements by energy policy officials commenting on low stocks. Invariably, these officials call on OPEC to boost output so stocks will rise. The economic ignorance displayed in these appeals is appalling.

My favorite quote appeared in November. While attending the World Energy Congress, U.S. Energy Secretary Bodman called on OPEC to boost oil production. As the November 13 *Financial Times* reported, "Samuel Bodman, the U.S. energy secretary, urged

OPEC on Tuesday to raise production at its weekend summit. He said the price of oil was at such high levels in part because developed countries' stocks were below their five-year averages."[3] The story then continued:

> But Mr. Bodman told reporters at the World Energy Congress in Rome: "I have asked that that be reconsidered. I have asked them to increase production." He said he was trying to draw OPEC's attention to the fact that the inventory numbers were "troubling."[4]

Bodman's statement makes it sound as if commercial inventories will increase if OPEC boosts production. But doesn't something else have to happen for this to occur? Don't companies have to agree to buy the oil? Suppose, given the current financial crisis, that companies choose not to buy the oil? What happens then?

The data demonstrate that companies accumulate incremental stocks oil only if it is profitable to do so. Since May, it has not been profitable. Since May, companies have been dumping stocks. This story is told with two charts.

Figure 8 shows data on "returns to storage" for crude in 2006 and 2007. Returns to storage will be a new concept here because, to my knowledge, neither the Energy Information Administration nor any other organization follows the idea. However, the concept goes back to John Maynard Keynes, who, whatever his other vices, was one of the world's great commodity traders. Returns to storage measure the financial return earned by purchasing a physical unit of a commodity, selling a future for delivery at a later date, and storing the commodity. If, for example, one buys crude for $50 per barrel and sells a future for delivery a year hence at $100 per barrel, one earns a return of 100 percent. The trade, referred to as cash and carry, can be very profitable.

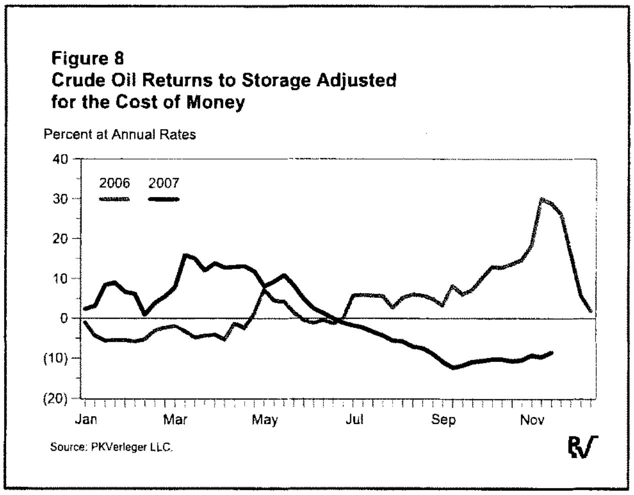


Figure 8
Crude Oil Returns to Storage Adjusted for the Cost of Money

Source: PKVerleger LLC.

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[3] Ed Crooks and Javier Blas, "U.S. Urges OPEC to Raise Production," *Financial Times*, November 13, 2007.

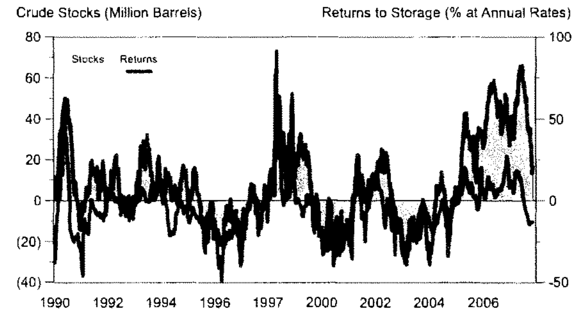
[4] Crooks and Blas.

Rumor has it that Keynes once filled the basements of several colleges with wheat when the returns were really high.

Figure 8 shows that returns to storage for crude oil were positive through the second half of 2006 and the first half of 2007. Since the end of May 2007, though, returns have been negative. Logically, one would expect stocks to have accumulated during the second half of 2006 and the first half of 2007 and then be liquidated from June 2007 forward.

The data on inventory accumulation and liquidation confirm this hypothesis. Figure 9 shows that stocks tend to rise with positive returns and decline when returns are negative. Figure 9 shows the deviations of U.S. inventories from trend from 1990 to 2007. (Note: during this period, we have observed a steady decline in the "normal" level of inventories held by commercial firms. This decrease is explained by improved operating efficiencies in the sector.)

Figure 9
Deviation from Trend of Commercially Held Crude Stocks, 1990 to 2007, vs. Returns to Storage Adjusted for the Cost of Money



Source: PKVerleger LLC

As can be seen from Figure 9, stocks decline when returns fall below zero while tending to rise when returns are positive. The explanation for this effect is quite simple. Financial officers of firms holding oil stocks have a wide number of options. They can invest their cash in commercial paper, Treasury bills, or inventories. They can even borrow to acquire additional stocks. Their decisions are driven by the returns offered by various instruments.

This finding, while intuitively obvious, seems to have escaped many who follow the oil market. Recently, though, the financial market's effect on oil and the rest of the economy has become painfully apparent. In particular, the subprime crisis has caused many lenders to withdraw from the commercial paper market. In turn, the cost of borrowing has increased, raising the cost of holding oil stocks. At the same time, buyers who had lifted forward prices to a premium over cash prices have liquidated positions, in part to obtain cash. This has made it expensive to hold inventories and so stocks have dropped.

Econometric research on the relationship between inventories and price spreads suggests the stock reduction caused by the financial crisis may have added a dollar or two to crude prices. In other words, the stock decline tied to the financial problems explains a small part of the $30 price rise.

Conclusion: The rapid climb in oil prices since August cannot be explained by any of the traditional factors.

International events certainly did not push prices higher. If anything, they forced prices lower. Expectations of strong future growth in consumption did not change markedly after August and thus also must be rejected as a cause of the price rise.

Speculators also do not seem to have played a role in the run-up from $70 to $98 per barrel. Passive investors who buy commodities as an alternative asset class may have reduced ownership of oil as prices rose if they maintained a diversified portfolio and followed the formulas recommended by Goldman Sachs or the managers of the Dow Jones-AIG index. Financial turmoil since August would have further discouraged investors.

Expectations regarding future oil prices also did not change significantly.

Only shifts in inventory management and option hedging could have contributed to the price rise. But these influences certainly cannot explain a $30-per-barrel increase. Indeed, it is difficult to ascribe more than $5 of any increase to these factors.

By deduction, then, the cause of the increase must lie elsewhere. The one and only significant change was DOE's decision to begin filling the Strategic Petroleum Reserve.

After more than a year and a half of inaction, the Department of Energy renewed its program to fill the SPR. On August 23, 2007, DOE acquired 97,973 barrels of light sweet crude. Deliveries continued through November, with 5.2 million barrels of crude delivered. An additional 2.2 million barrels were projected to be delivered in December and January.

The mix of crude going into the SPR was approximately 33 percent sweet and 66 percent sour. Table 1 (page 12) presents the details, including type of crude, month of delivery, and total.

As can be seen from Figure 10 (page 12), the oil volumes held in the SPR have increased sharply. The fluctuations in the amounts stored correspond to the surge in crude prices. Indeed, reviewing the history of 2006 and 2007, DOE's action appears to be the single major activity that differentiated 2007 from 2006. Yet despite the evidence, DOE has continued to deny responsibility for the price rise. Indeed, Secretary Bodman seems to have a penchant for belittling such claims without bothering to examine the facts. Recently *Platts* quoted him as calling "the current fill rate, which moves an average

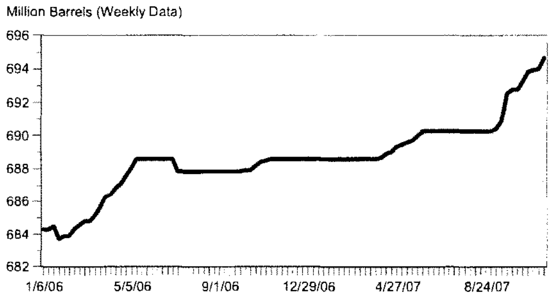
55,000 b/d of royalty-in-kind oil into the reserve, 'modest.'" The Secretary also said, according to *Platts*, that the fill program "'does not materially' lift the price of oil."[5]

Table 1. Rate of Fill for the U.S. Strategic Petroleum Reserve, August 2007 to January 2008

	Sour Crude (Barrels)	Sour Crude (Barrels per Day)	Sweet Crude (Barrels)	Sweet Crude (Barrels per Day)	Sulfur Content of Sour Crude (%)	Sulfur Content of Sweet Crude (%)
Aug 2007			166,273	11,085		0.37
Sep 2007	1,895,017	63,167	472,749	15,758	1.26	0.34
Oct 2007	547,018	17,646	781,375	25,206	1.37	0.34
Nov 2007	1,103,514	36,784	278,779	9,293	1.05	0.28
Dec 2007	2,000,000	64,516	1,000,000	32,258	1.46	0.32
Jan 2008			250,000	8,065		0.28
Total	5,545,549	40,776	2,949,176	21,685		
Rate of Fill – January through June 2008				39,200		

Source: Communication from Committee Staff from data supplied by U.S. DOE.

Figure 10
Crude Stocks Held in the U.S. Strategic Petroleum Reserve in 2006 and 2007



Source: U.S. DOE.

The Secretary's statement might be correct if DOE were adding only sour crude to the reserve. Sour crude, as noted above, is in surplus. However, more than a third of the oil added to the SPR is light sweet crude. Today, sweet crude constitutes less than one quarter of the world's supply and probably less than one half of this production is available to the market. Thus DOE is taking more than a "modest" amount of the available sweet crude from the market. Indeed, the market impact may be significant given the very low price elasticities of demand for crude, especially light sweet crude.

The empirical impact of DOE's actions on light crude prices depends on several factors, including

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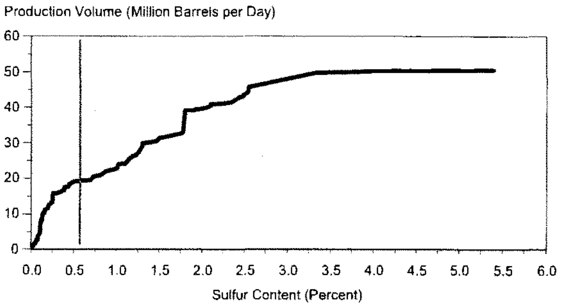
[5] *Platts Global Alert*, November 8, 2007.

- The size of the market for sweet crude,
- The ability of consumers to substitute sour crude for sweet crude, and
- The price elasticity of demand for sweet crude.

The size of the sweet crude market may be as large as 20 million barrels per day or as small as five million barrels per day. Figure 11 shows the distribution of the global crude market by sulfur content. The data are taken from the Energy Intelligence Group's *International Crude Oil Market Handbook.* As can be seen from Figure 11, EIG identified a total of 20 million barrels per day of global production as having a sulfur content of 0.5 percent or less. It is this output—and not total world production—that must be used to measure market size.

Figure 11
Cumulative Distribution of Global Crude Production in 2006 as Reported by Energy Intelligence Group



Source: Energy Intelligence Group

However, a significant portion of the 20 million barrels of light sweet crude production is captured under long-term supply arrangements and thus not available to DOE or to the firms that might want to replace the light sweet crude they would have otherwise received had DOE not acted. Some light sweet crude is produced in China, for example, and stays in China. Some light sweet crude is tied permanently to Asian consumers, while other volumes are linked directly to European refiners. Thus the pool of oil from which DOE is pulling may be smaller than five million barrels per day. This means DOE may be taking between 0.1 and 0.5 percent of the light sweet crude from the market.

This supply cannot be replaced. Middle Eastern countries can raise production of sour crude to compensate for increased demand tied to the SPR filling. There is, in contrast, no surplus capacity to produce light sweet crude. DOE is shrinking the market.

The price impact of removing light sweet crude from the market depends in part on the ability of refiners to replace sweet crude with sour crude. In theory, refineries are flexible. The best ones should be able to substitute crude oils with higher sulfur content for the lost supplies of sweet crude. However, new regulations limiting the sulfur content of diesel fuel bring this assumption into question. Recent reports by the International

Energy Agency suggest these requirements make it much more difficult for refiners to substitute sour for sweet crude. In particular, desulfurization units at refineries often limit the amount of product that can be made. This means product volumes are lost when sweet crudes are removed from markets. Regulations requiring the reduction of sulfur in diesel fuel appear to impose especially severe constraints on refiners.

Refiners and traders have stated privately that light sweet crude is particularly valuable given new regulations limiting the sulfur content of gasoline and diesel fuel. However, other than a few mentions in the *IEA Monthly Oil Market Report*, very little has been written on the intrinsic value of light sweet crude.

In one private arbitration, refining engineers explained that light sweet crude was of particular value because it could be taken to the distillation unit directly and thus did not clog units that pretreated heavier, sourer crudes. In addition, the engineers explained that more crude could be processed and more product could be made in facilities where desulfurization or hydro-treating units constrained total refining operations. I have yet to find citations explaining these claims in detail, although I have read such statements made under oath in legal proceedings.

The price impact of removing light sweet crude from the market price depends on the price elasticity of demand for crude oil. Professor Nordhaus recently published an estimate of the price elasticity of demand for crude of -0.04.[6] This elasticity is measured in regard to refiner demand for all crude oil. Because light sweet crude oil has special properties, the price elasticity of demand for light sweet crude may be lower, say, -0.02. The latter elasticity implies that a one-percent reduction in the light sweet crude supply would require a price increase of between 25 and 40 percent to balance the market.

As noted above, we calculated that DOE's SPR action has taken between 0.1 and 0.5 percent of the sweet crude supply from the market. Using the elasticities given earlier, one can estimate that DOE's actions added between five and 20 percent to the price of oil. On average, it appears that DOE's SPR program probably added $10 per barrel.

Option hedging may have magnified the price rise.

The November 29, 2007 *New York Times* carried a detailed report on airline fuel hedging practices. In one of the few good articles on petroleum to appear in the *Times* in years, Jeff Bailey disclosed a secret that a few of us have known for a long while: Southwest Airlines has fuel management practices that are very different from all other airlines.[7] Through hedging, Southwest has held its fuel cost to a $51-per-barrel basis in 2007, 2008, and 2009, while other airlines are dealing with prices between 50 and 100 percent higher. Southwest's hedges enabled it to book a profit on fuel of $429 million for the first half of 2007. The profit might jump to $1 billion in the second half of the year.

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[6] William Nordhaus, "Who's Afraid of a Big Bad Oil Shock," *Brookings Papers on Economic Activity* 2, 2007 (forthcoming).

[7] Jeff Bailey, "An Airline Shrugs at Oil Prices," *The New York Times*, November 29, 2007.

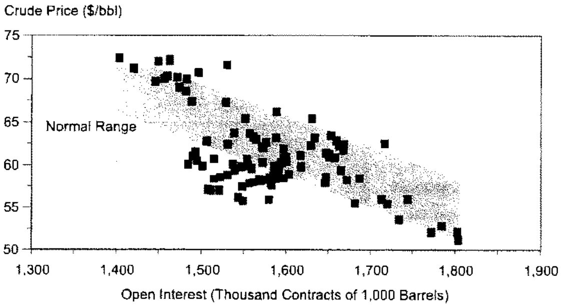
Southwest achieved its position through the purchase of options: instruments that allow it to buy crude at the strike price ($51-per-barrel crude equivalent) if market prices are higher. Should prices fall below $51, though, Southwest is not obligated to act.

Southwest is not the only firm to use options. Many large consumers and some speculators have purchased call options with strike prices between $60 and $100 per barrel, while several producers have hedged production by acquiring puts. Bailey reported on the position of a number of airlines that had purchased calls at strike prices ranging from $62 per barrel (Alaska Airlines) to $99 (Delta).

The institutions that write call options hedge their exposure to Southwest and others following the same strategy: they purchase futures as prices rise. Thus as prices went from $70 per barrel on August 18 to $95 in early November, the financial institutions that had written these calls bought additional futures. Their buying helped to raise prices.

Bankers refer to this process as "delta" hedging. The procedures and the effects are well known. Indeed, delta hedging was widely credited for a large fraction of the decline in copper prices that occurred in 1996 when Sumitomo's effort to manipulate copper prices failed. Last year, delta hedging of puts written to oil producers seemed to accelerate the price decline. The action clearly exaggerated the decrease. I am relatively certain WTI prices would never have dropped below $65 per barrel early in 2007 (they actually went to $51) had they not been pushed down by delta hedging.

Figure 12
Light Sweet Crude Prices vs. Open Interest in Crude Futures, August 2006 to January 2007



Source: NYMEX; PKVerleger LLC.

The decrease can be seen from Figure 12. This graph shows open interest in crude oil futures on the horizontal axis and price on the vertical axis.[8] Under the delta hedging hypothesis, one would expect to observe falling prices associated with rising open interest because the financial firms that had written put options would need to sell more futures contracts. Precisely such a relationship was observed. As can be seen from Figure 12, during the fall of 2006, there was a relatively close correlation between open interest and prices. In other words, delta hedging pushed prices down.

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[8] In this graph, the open interest represents the combined total of NYMEX and ICE contracts.

The shaded area in Figure 12 represents a normal range. This is a calculated from a regression of prices on open interest. It shows a two-standard-deviation range of the predicted price given open interest for the fall period.

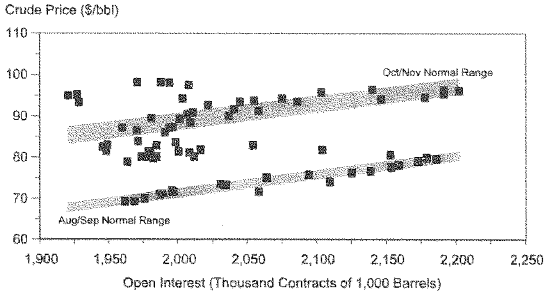
The link to delta hedging in the fall of 2006 was confirmed in discussions with traders. From time to time in markets, one reads or hears that large price moves on a single day were triggered by computer purchases or sales made by financial firms seeking to cover options written by the firms to consumers or producers.

This fall we have observed precisely the opposite effect. Figure 13 shows a scatter diagram of open interest and prices for the August to November 2007 period. Two normal ranges are shown. The first, at the bottom of the graph, is for the August/September period when call options were being hedged for November. The second range at the top shows the normal range calculated for the hedging of December options during the October/November period. Again, we note the shaded area. In 2007 the curves are upward sloping, suggesting it was calls, not puts being hedged.

These data indicate that the price increases tied to DOE's purchases of sweet crude oil were magnified by option hedging.

The market chaos caused by DOE's filling of the SPR can only be mitigated if sour crude is added to the reserve. Regretfully, DOE will do the opposite in the first half of 2008.

Figure 13
Light Sweet Crude Prices vs. Open Interest in Crude Futures, August 2007 to November 2007



Source: NYMEX; PKVerleger LLC.

I understand from Committee Staff that DOE will add 39,200 barrels per day of light sweet crude to the SPR over six months beginning in January 2008 under a contract announced in November. This rate doubles the rate of the oil being recovered over the last four months of 2007. I suppose I should welcome the announcement. However, I do not.

Let me put the news in perspective. For the first half of 2008, DOE will take between 0.2 and 0.8 percent of the light sweet crude oil supply available to U.S. refiners off of the market. Applying the Nordhaus price elasticities, this action will boost crude prices between two and five percent. If the price elasticity of demand for light sweet crude is half of the Nordhaus elasticity, the price increase will be between five and ten percent.

This price rise will be magnified by delta hedging of options. Indeed, one can expect prices to move well above $100 per barrel if the relationships suggested here hold. Extrapolation of this fall's evidence could take prices as high as an unbelievable $120 if adult supervision is not brought to bear on DOE. The situation could be made even worse by the arrival of the gasoline season. As noted above and in more detail elsewhere, new environmental regulations place an extra premium on sweet crude in the spring and summer. It will be a disaster for motorists. I suspect it will also be a disaster for the U.S. economy.

I hope events prove me incorrect. I hope my economic analysis is faulty. However, DOE's current action is needlessly risking the health of the U.S. economy. As an alternative, DOE could fill the reserve with sour crude oil, that is, crude having sulfur content above one percent. In theory, DOE could sell sweet crude while acquiring sour crude. Given relative prices, DOE could acquire 12 barrels of sour crude for every 10 barrels of sweet crude sold. Such a policy would accelerate the filling of the reserve and provide even greater protection to the U.S. economy in the event of a true catastrophe.

Properly managed, such a policy would not affect product availability during a crisis. Instead, in the event of troubles, certain environmental regulations could be relaxed to assure Americans of an adequate supply of product. For example, it might be necessary to allow diesel fuel sulfur standards to rise to 200 parts per million.

While some will criticize the necessity of modifying sulfur standards, I note that such changes may be necessary if hurricanes shut down several Gulf Coast refineries for a prolonged period, *even if the SPR has sweet crude*. It is well understood—but never stated—that fuel specifications have to be relaxed after a severe hurricane.

Today, I would argue that the American economy and American consumers would be much better off if DOE changed the mix of crudes being added to the strategic reserve. If I am right, it could make the difference between seeing $60-per-barrel prices next summer and $120-per-barrel prices.

I thank the Committee for its attention.

Appendix A

CFTC Data on Commitments of Traders: Statistics on Commitments of Index Funds[9]

On January 8, 2007, the CFTC issued new information on commitments of "Index Funds" in agricultural futures. These data provide a unique view into the size of the two largest passive long commodity funds, the Goldman Sachs Commodity Index (GSCI) and the Dow Jones-AIG Commodity Index (DJ-AIG). Based on a quick review of the data and the application of some simple algebra, we draw the following conclusions:

> The DJ-AIG index has roughly $40 billion invested in it.
>
> The GSCI has between $60 and $66 billion invested in it.
>
> Total investment in commodities is approximately $100 billion, which roughly matches published figures from other sources.

The CFTC does not present information on index trading in metals or oils. However, one can back out rough estimates. As of Wednesday, January 3, 2007, it appeared that commodity investors accounted for more than 20 percent of the long positions in WTI and Brent, more than 25 percent of the long position in the RBOB gasoline contract, and more than 35 percent of the long position in distillate heating oil.

Background

The CFTC explained the new data as follows:

> ***Supplemental Report*** – Based upon the information contained in the report of futures-and-options combined in the short format, the Supplemental Report shows an additional category of "Index Traders" in selected agricultural markets. These traders are drawn from the Noncommercial and Commercial categories.
>
> Coming from the Noncommercial category are positions of managed funds, pension funds, and other investors that are generally seeking exposure to a broad index of commodity prices as an asset class in an unleveraged and passively managed manner. Coming from the Commercial category are positions for entities whose trading predominantly reflects hedging of over-the-counter transactions involving commodity indices—for example, a swap dealer holding long futures positions to hedge a short commodity index exposure opposite institutional traders, such as pension funds.

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[9] Originally published as *Notes at the Margin Supplement to January 8 Issue*, January 9, 2007.

> All of these traders—whether coming from the Noncommercial or Commercial categories—are generally replicating a commodity index by establishing long futures positions in the component markets and then rolling those positions forward from future to future using a fixed methodology.
>
> Some traders assigned to the Index Traders category are engaged in other futures activity that could not be disaggregated. As a result, the Index Traders category, which is typically made up of traders with long-only futures positions replicating and index, will include some long and short positions where traders have multi-dimensional trading activities, the preponderance of which is index trading. Likewise the Index Traders category will not include some traders who are engaged in index trading, but for whom it does not represent a substantial part of their overall trading activity.

We summarize the basic statistics from the new CFTC reports in Table 1. There we show the contract, the net position of index funds in the contract, and the percentage of open interest in the contract accounted for by index funds.

Table 1. Net Position of Index Funds in 12 Agricultural Contracts

Contract	Total Open Interest	Net Position of Index Traders	Index Traders as a Percentage of Total Open Interest
Wheat: Chicago Board of Trade	513,744	201,104	39.1
Wheat: Kansas City Board of Trade	127,957	29,963	23.4
Corn: Chicago Board of Trade	1,962,900	421,579	21.5
Soybeans: Chicago Board of Trade	497,953	129,727	26.1
Soybean Oil: Chicago Board of Trade	287,650	67,869	23.6
Cotton No. 2: New York Board of Trade	244,076	82,389	33.8
Lean Hogs: Chicago Mercantile Exchange	180,870	83,346	46.1
Live Cattle: Chicago Mercantile Exchange	267,023	94,995	35.6
Feeder Cattle: Chicago Mercantile Exchange	30,462	7,373	24.2
Cocoa: New York Board of Trade	162,595	13,666	8.4
Sugar No. 11: New York Board of Trade	786,586	156,614	19.9
Coffee C: New York Board of Trade	177,345	36,982	20.9

Source: CFTC Supplemental Report on Commitments of Traders.

Calculating the Size of Individual Funds

The data published by the CFTC can be used to gauge the size of the two principal funds, the DJ-AIG and the GSCI, because neither fund contains all 12 agricultural commodities. For example, the GSCI contract includes Kansas City wheat and feeder cattle but the DJ-AIG does not. On the other hand, the DJ-AIG includes soybean oil while the GSCI does not. This means that one can gauge the size of each fund ***if one assumes there are no other index funds in the market***. (This assumption is extreme because there is at least one other fund, the Deutsche Bank Index. However, it apparently is quite similar to the DJ-AIG.)

If one makes this assumption, one can calculate the size of the index by determining the value of the index position in the futures contract unique to the index (for example, soybean oil for the DJ-AIG) and then dividing this value by the percentage weight in the index assigned to that commodity. For the DJ-AIG index, the calculation works as follows:

> Index funds held 67,874 soybean oil contracts on January 3.
>
> The value of the contracts on January 3 was roughly $1.2 billion.
>
> The DJ-AIG market share for the index was 3.1 percent.
>
> Thus the total size of the DJ-AIG index was approximately $39 billion (1.2 divided by .031).

A similar calculation for the GSCI yielded estimates of $59 and $66 billion. These market values were then tested against the other commodities. Specifically, we multiplied the estimated value of the GSCI index by the index weight for CBOT wheat and the estimated value of the DJ-AIG index by its weight for CBOT wheat. The sum of the two values 92 percent of the estimated index investment in wheat. Percentages for the other commodities were generally between 95 and 105 percent, although weights differed considerably. This test provides initial confirmation that the sizes are roughly correct.

Table 2. First Approximation of the Share of DJ-AIG and GSCI in Principal Energy Funds

Commodity	Dollar Value of Contracts (Millions)	DJ-AIG Allocation (%)	GSCI Allocation (%)	Percent of Market Accounted for by Index Investors
Natural Gas	$128,769	7.1	7.4	5.6
WTI	$99,570	10.6	31.2	23.1
NY Harbor RBOB	$9,747	3.2	2.4	27.6
NY Harbor Heating Oil	$14,909	3.1	8.0	40.5
Brent	$33,343		15.0	27.0
Gasoil	$16,526		4.4	16.0

Source: Weights taken from Alvin Ying et al., *Commodity Index Monitor*, December 2006; PKVerleger LLC.

Calculating the Market Share in Petroleum

Our estimate of fund size was used to calculate the aggregate index positions in energy markets. The calculations are shown in Table 2. Column 1 shows the estimated value of the individual market (price multiplied by open interest on January 3, 2007). Columns 2 and 3 show the share of total investment in the fund to the individual contract. Column 4 shows our estimate of the total fund investment in the commodity as a percentage of the commodity's value.

INTERNATIONAL
Herald Tribune

Southwest Airlines gains advantage by hedging on long-term oil contracts

By Jeff Bailey
Wednesday, November 28, 2007

CHICAGO: Southwest Airlines, in danger for much of this year of losing its quirky dominance over the U.S. domestic airline industry, could soon be standing, once again, head-and-shoulders above its competition.

Better service? Happier and more productive workers?

Not this time. The reason for Southwest's rapidly increasing advantage over other big airlines is much simpler: It loaded up years ago on hedges against higher fuel prices. And with oil trading above $90 a barrel, most of the rest of the airline industry is facing a huge run-up in costs, and Southwest is not.

Southwest owns long-term contracts to buy most of its fuel at the equivalent of $51-a-barrel oil through 2009. The value of those hedges soared as oil raced above the $90-a-barrel mark and they are now worth more than $2 billion. Those gains would mostly be realized during the next two years.

Other major airlines passed on buying all but the shortest-term insurance against high fuel prices, giving Southwest executives a mild case of schadenfreude.

"It's true," said Scott Topping, treasurer at Southwest and keeper of the hedges. "We're not sure what to root for," in terms of oil prices. Southwest is hurt, too, by higher fuel prices, but far less than competitors, giving the carrier a distinct advantage.

Some other airlines, meanwhile, could start reporting losses as early as the current quarter, unless they are able to rapidly raise fares, said Roger King, an analyst at CreditSights. "Airlines were not made for $90 oil," King said in a report last week.

Just last January, it was other airlines that were enjoying the prospect of Southwest's misery. As oil dipped down to about $52 a barrel that month, it was looking like an airline with more than its share of problems.

Traditional hub-and-spoke carriers like Delta Air Lines and Northwest Airlines had deeply cut their costs by running through bankruptcy and could now profitably compete on fares with Southwest. Moreover, because they could draw more business travelers with first- and business-class seating and other perks, hub-and-spoke carriers could bring in more revenue per seat than Southwest.

Southwest also has the highest labor rates in the industry because it was the only big airline that had not demanded deep wage concessions from its workers.

Gary Kelly, chief executive at Southwest, was the architect of the fuel hedging program when he was chief financial officer. The hedges have helped keep Southwest profitable - producing gains of $455 million in 2004, $892 million in 2005 and $675 million in 2006 and $439 million for the first nine months of 2007, as oil prices nearly doubled this year. Other airlines were mostly unprotected against the increases.

Kelly does not minimize the need for Southwest to change its business, including find ways to charge more per ticket and to reduce its operating costs. The airline has already changed its boarding policy to favor business travelers and to do away with the practice of passengers lining up, cattle-call style, an hour or more before boarding. It is looking into code-sharing arrangements with international airlines that would pay Southwest for feeding travelers to overseas flights operated by others. And it is exploring selling tickets through channels other than its own reservation system and Web site, to better attract business travelers.

Of these and other changes designed to increase revenue at Southwest, Kelly said, "It's going to take us the entire decade." The hedges, he said, "bought us time to retool our company."

Indeed, other U.S. carriers could identify investments they needed to make in recent years - redesigning airplane interiors to compete with foreign airlines, upgrading computer systems to improve employee productivity and airline reliability - but they often lacked the money to finance the projects. All but American Airlines among the major hub-and-spoke carriers have spent time in bankruptcy, and American only narrowly avoided it.

Other airlines certainly could have hedged in the late 1990s when they were solidly profitable. But they were a little giddy over that decade's boom, entering into expensive labor agreements and, in some cases, buying new planes.

Since Sept. 11, 2001, some airlines have been too broke to hedge; many agreements between parties in the energy derivatives market require players to either have a strong credit rating or to post collateral. Also, some forms of hedging are expensive. The hedges used during the first nine months of 2007, which included options that allowed - but did not require - Southwest to buy energy products at certain prices, cost $42 million. A small sum in retrospect, but not so easily spent when higher oil prices are a possibility, but not a certainty.

At $52 a barrel, airline executive were thinking, "Maybe this will continue," said Frank Boroch, an analyst at Bear Stearns. "Why hedge at $52 when it might go to $40?"

Now, airlines unprotected from higher oil prices face some tough decisions, Boroch said. They can ground some fuel-guzzling planes and hope that reduced capacity drives up fares and thus profits. They can merge with another airline to reduce costs, which is what a New York hedge fund is asking Delta and United Airlines to do. Or, as Boroch wrote in a report earlier this month, they could "maintain the status quo until Chapter 11 becomes inevitable again."

Higher fares would certainly help airlines, but raising listed fares and actually collecting significantly more money per ticket are two different things. Airlines may end up selling more seats at lower fare levels or discounting madly just before a flight to fill it up. Boroch counted six industry fare increases during the third quarter, yet Southwest's average ticket price for that period, $105.37, was just 62 cents higher than a year earlier.

Southwest generally expects high fuel prices to prevail and, if it sees what it thinks is a short-term decline in oil prices, it would consider adding to its hedges in years beyond 2009. Other airlines failed to hedge last January, with oil at about $52 a barrel, but that was also an opportunity for Southwest, said Topping, the treasurer. "In hindsight, we'd have picked more up."

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January 24, 2008

Fuel Prices Hurt Delta, but Hedge Lifts Southwest

By THE ASSOCIATED PRESS

ATLANTA — Delta Air Lines, the nation's No. 3 carrier, said Wednesday that it was hampered by high fuel prices in the fourth quarter but was able to narrow its loss because of a solid increase in sales.

A rival carrier, Southwest, however, reported that its profit doubled in the quarter because of its hedging against high fuel costs,

Delta, which is based in Atlanta, said that it lost $70 million, or 18 cents a share, in the fourth quarter, compared with a loss of $1.98 billion for the same period a year earlier. The airline did not provide a per share figure for the previous year, when it was in bankruptcy.

Excluding reorganization items, Delta said it lost $105 million in the quarter. Analysts surveyed by Thomson Financial had expected a loss of 18 cents a share. Analysts' estimates generally exclude one-time items.

Revenue rose 10 percent to $4.68 billion, compared with $4.25 billion recorded a year earlier.

In the quarter, Delta hedged 21 percent of its fuel consumption, resulting in an average fuel price of $2.61 a gallon. Delta said it realized roughly $40 million in cash gains on fuel hedge contracts settled during the quarter.

Even so, it said it spent $1.36 billion on fuel and related taxes in the quarter, compared with $1.06 billion a year earlier.

Southwest, on the other hand, said fuel hedging helped it post a profit again in the fourth quarter, but the chief executive, Gary C. Kelly, did not rule out the possibility Wednesday that the airline might lose money in the first three months of this year.

"Our goal for the year is to drive earnings increases," Mr. Kelly said. "It will be harder in the first quarter because of that cost hurdle."

In the fourth quarter, Southwest earned $111 million, or 15 cents a share, compared with a profit of $57 million, or 7 cents a share, a year earlier.

The company said profit excluding one-time gains was 12 cents a share.

Analysts had expected Southwest to earn 10 cents a share, according to a Thomson Financial survey.

Revenue rose 9 percent, to $2.49 billion, just above analysts' forecast of $2.48 billion.

For the current quarter, which ends March 31, Southwest estimates it will pay about $2 a gallon for fuel, even with hedging. That's up from $1.72 a gallon in the fourth quarter.

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AIRLINES

Southwest Airlines reaps benefits of fuel hedging strategy

Many analysts believe it may be one of the few U.S. carriers -- if not the only one -- to post a profit this year while still offering lower fares.

By Peter Pae

Los Angeles Times Staff Writer

May 30, 2008

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What would it be like to pay $2 for a gallon of gasoline when everyone else is paying twice that much?

Southwest Airlines Co. knows, and that's why many analysts believe it may be one of the few U.S. carriers -- if not the only one -- to post a profit this year while still offering bargain fares.

The airline, one of the largest at Los Angeles International Airport, locked in more than 70% of the fuel it expected to consume this year at about $51 a barrel, far below Thursday's closing crude price of $126.62 a barrel.

Other large airlines, meanwhile, have only 20% to 30% of their fuel "hedged" this year at an average cost of $100 a barrel.

With the huge cost advantage, Southwest hasn't had to hike air fares or like other carriers impose new fees, including last week's decision by AMR Corp.'s American Airlines to charge domestic fliers $15 for checking a single suitcase and to increase other fees.

The advantage won't last forever because oil prices could plummet, and even if they stayed high the amount of fuel Southwest has been able to hedge in future years diminishes considerably from 55% next year to 30% in 2010.

But because of a calculated risk the airline took last year -- essentially betting correctly that fuel prices would escalate -- Southwest "may be the only one left standing" by the end of 2008, said Terry Trippler, an industry analyst who expects most major carriers to post a loss this year with perhaps a few even going into bankruptcy.

"Southwest is sitting there looking really good," Trippler said.

The carrier's aggressive fuel hedging is having a broader effect on fares in the markets it serves, travel experts say.

Tom Parsons, publisher of BestFares.com, said that travelers flying between two cities where there is no competition from Southwest would pay about $340 more round-trip than they did just six months ago.

"The difference today between flying on a short-haul route where air fares are offered only by one of the top six major airlines are reaching ridiculous dollar numbers compared to short-haul routes served by low-cost carriers such as Southwest," Parsons said.

FareCompare.com, an air fare search service, noticed that American last week dropped the price of a round-trip ticket by an average of $30 on routes also served by Southwest including flights out of San Diego, Seattle and Las Vegas. At the same time American was raising fares by an average of $60 in other markets and imposing the new bag fees, according to FareCompare.

Emboldened with lower fuel costs than its competitors, Southwest has been able to offer promotional one-way fares for as little as $29. Last week, the offer launched with the slogan "Why drive when you can fly . . . ?"

Southwest also has been able to respond to the woes of other airlines with a bit of smugness.

When American said last week that it would begin charging for a single checked bag because of fuel costs, Southwest quickly responded by saying that it was doing "everything" to boost revenue, "but it's not our goal to nickel and dime our customers."

"We want to assure you that Southwest Airlines still allows you to check up to two free bags when you travel with us," the airline said on its website. "We look forward to seeing you onboard very soon. And bring your luggage!"

The cost difference between Southwest and other carriers that don't hedge as much can be dramatic. Fuel costs were up 20% for Southwest in the first quarter whereas American said its fuel costs were up nearly 50%, which wiped out profit for the nation's largest airline. On average, Southwest paid about $1.98 for a gallon while American, which hedged about 27% of its fuel use, paid $2.74 a gallon.

Southwest Treasurer Scott Topping, considered the guru on hedging for the airline, said the carrier jumped into hedging in "a big way" in 1999 when oil was at $11 a barrel.

Since then the airline has hedged 70% to 80% of its anticipated fuel use every year, more than any other airline. The airline said it saved $727 million last year by locking in lower fuel prices in prior years.

So far, the carrier hasn't had a year when it lost money on fuel hedges.

"Knock on wood," Topping said, noting that opportunities to lock in favorable fuel prices were diminishing. Future prices for crude oil are hovering at $130 a barrel -- even for deliveries several years from now. Much of this year's fuel prices were locked in early last year when crude prices slipped from the mid-$70s to $50 a barrel, Topping said.

In retrospect, Topping said, he would "have loved" to have hedged a higher percentage of the airline's estimated fuel consumption next year at $51 a barrel, the same price it got for this year's fuel purchase. The airline opted to hedge only 55% of its fuel use in 2009.

For now, the fuel cost savings are enabling Southwest to continue to expand -- albeit less aggressively than in the past -- while other airlines are slashing flights.

"We've got, I think, the best fuel price protection in the industry," Southwest Chief Executive Gary Kelly said during a conference call with analysts last month. "Our belief is that we'll be able to drive revenue growth, protect our fuel prices and the rest of our cost structure, such that we can continue to grow the airline."

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